





# THE ART BULLETIN

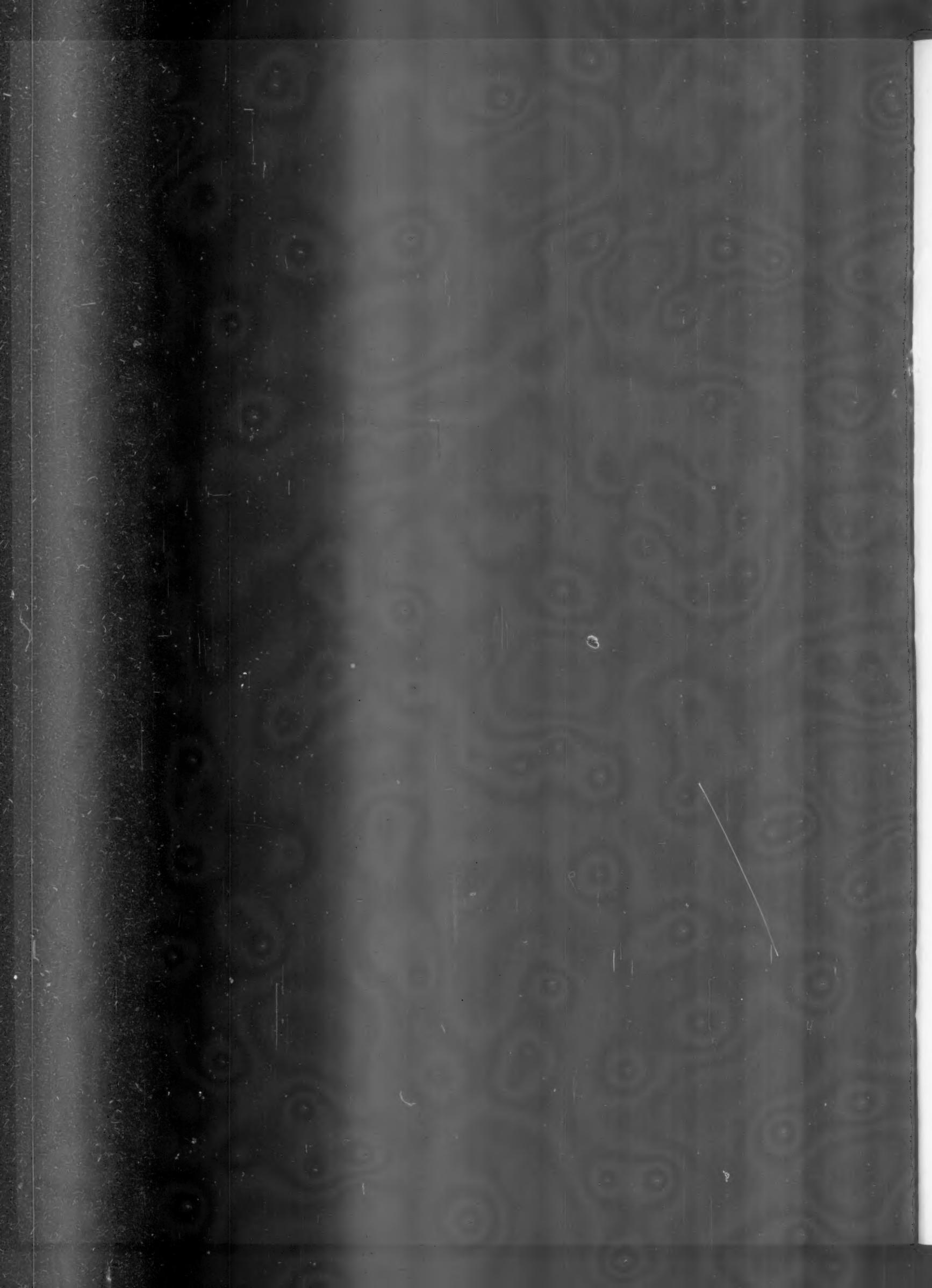
A QUARTERLY PUBLISHED BY  
THE COLLEGE ART ASSOCIATION OF AMERICA

MARCH 1958  
VOLUME XL  
NUMBER ONE

## CONTRIBUTING INSTITUTIONS

BRYN MAWR COLLEGE • COLUMBIA UNIVERSITY • HARVARD UNIVERSITY • INDIANA UNIVERSITY • THE INSTITUTE FOR ADVANCED STUDY • NEW YORK UNIVERSITY • OBERLIN COLLEGE • PRINCETON UNIVERSITY • SMITH COLLEGE MUSEUM OF ART • UNIVERSITY OF CHICAGO • UNIVERSITY OF ILLINOIS • UNIVERSITY OF LOUISVILLE • UNIVERSITY OF MICHIGAN • UNIVERSITY OF PENNSYLVANIA • VASSAR COLLEGE • WELLESLEY COLLEGE • WILLIAMS COLLEGE • YALE UNIVERSITY

THE BROOKLYN MUSEUM • CARNEGIE CORPORATION OF NEW YORK • THE CATHERWOOD FOUNDATION • CLEVELAND MUSEUM OF ART • THE CORNING MUSEUM OF GLASS • DUMBARTON OAKS RESEARCH LIBRARY AND COLLECTION • THE FRICK COLLECTION • THE METROPOLITAN MUSEUM OF ART • THE PIERPONT MORGAN LIBRARY • MUSEUM OF FINE ARTS, BOSTON • NATIONAL GALLERY OF ART • NATIONAL GALLERY OF CANADA • SAMUEL H. KRESS FOUNDATION • WORCESTER ART MUSEUM



## EDITORIAL BOARD

**Editor-in-Chief:** JAMES S. ACKERMAN, *Department of Art, University of California, Berkeley, Cal.*

**Managing Editor:** HARRIET ANDERSON, *Princeton University Press, Princeton, N.J.*

**Book Review Editor:** ROSALIE B. GREEN, *Department of Art and Archaeology, Princeton University, Princeton, N.J.*

### TO SERVE THROUGH 1958

**VIRGIL BARKER**  
*University of Miami*

**SIRARPIE DER NERSESSIAN**  
*Dumbarton Oaks*

**ROBERT GOLDWATER**  
*Queen's College*

**GEORGE HANFMANN**  
*Harvard University*

**G. HAYDN HUNTLEY**  
*Northwestern University*

**H. W. JANSON**  
*New York University*

**HELENE KANTOR**  
*University of Chicago*

**RUTH WEDGWOOD KENNEDY**  
*Smith College*

**ULRICH MIDDELDORF**  
*Kunsthistorisches Institut,  
Florence*

**DOROTHY MINER**  
*Walters Art Gallery*

**AGNES MONGAN**  
*Harvard University*

**JAKOB ROSENBERG**  
*Harvard University*

### TO SERVE THROUGH 1961

**ALFRED H. BARR, JR.**  
*Museum of Modern Art*

**HARRY BOBER**  
*New York University*

**SUMNER MC K. CROSBY**  
*Yale University*

**RICHARD ETTINGHAUSEN**  
*Freer Gallery of Art*

**LLOYD GOODRICH**  
*Whitney Museum of  
American Art*

**JULIUS HELD**  
*Barnard College*

**HENRY-RUSSELL HITCHCOCK**  
*Smith College*

**ERNST KITZINGER**  
*Dumbarton Oaks*

**RICHARD KRAUTHEIMER**  
*New York University*

**KARL LEHMANN**  
*New York University*

**ERWIN PANOFSKY**  
*Institute for Advanced Study*

**ALEXANDER SOPER**  
*Bryn Mawr College*

### FOREIGN MEMBERS

### TO SERVE THROUGH 1958

**DIEGO ANGULO-ÍÑIGUEZ**  
*Diego Velasquez Institute,  
Madrid*

**JAN BIALOSTOCKI**  
*National Museum, Warsaw*

**ANTHONY BLUNT**  
*Courtauld Institute*

**ANDRÉ CHASTEL**  
*Institute of Art and  
Archaeology, Paris*

**L. M. J. DELAISSE**  
*Royal Library, Brussels*

**HERBERT VON EINEM**  
*University of Bonn*

**J. G. VAN GELDER**  
*University of Utrecht*

**HANS ROBERT HAHNLOSER**  
*University of Bern*

**JIRO HARADA**  
*Imperial Household  
Museum, Tokyo*

**VICTOR LASAREFF**  
*Academy of Sciences,  
Moscow*

**CARL NORDENFALK**  
*National Museum, Stockholm*

**RODOLFO PALLUCCHINI**  
*University of Padua*

**JOHN POPE-HENNESSY**  
*Victoria and Albert Museum*

Subscriptions for THE ART BULLETIN should be sent to the College Art Association of America at 432 Fourth Avenue, New York 16, N.Y. The price of THE ART BULLETIN is three dollars a number, twelve dollars a year.

Articles and monographs for the new Supplement series should be addressed to the Editor of THE ART BULLETIN, Department of Art, University of California, Berkeley 4, Cal.; books for review should be addressed to the Book Review Editor, College Art Association, 432 Fourth Ave., New York 16, N.Y. Before submitting manuscripts, authors are requested to consult the "Notes for Contributors" printed in the March issue.

Entered as second-class matter at the Post Office at New York, N.Y., October 24, 1925, under the Act of March 3, 1879; additional entry at the Post Office at Princeton, New Jersey, November 3, 1948.

# THE ART BULLETIN

MARCH 1958

Announcement of the Arthur Kingsley Porter Prize iv

The Werden Casket Reconsidered JOHN BECKWITH I

Underdrawings and *Pentimenti* in the Pictures of  
Jan Van Eyck JULES DESNEUX 13

Antoine Desgodets and the Académie Royale d'Architecture W. HERRMANN 23

Orphism and Color Theory HERSCHEL B. CHIPP 55

## NOTES

A Lost Masterpiece by Caravaggio EMMERICH AND CHRISTA BACK-VEGA 65

Sources for Delacroix's *Death of Sardanapalus* BEATRICE FARWELL 66

Wilhelm Lehmbruck's *Walking Girl* JOHN COOLIDGE 71

## BOOK REVIEWS

Paul Frankl, *Peter Hemmel, Glasmaler von Andlau* JANE HAYWARD 75

André Chastel, *Marsile Ficin et l'art* PAUL OSKAR KRISTELLER 78

Erwin Walter Palm, *Los monumentos arquitectónicos  
de la Española con una introducción a América* HAROLD E. WETHEY 79

Leo van Puyvelde, *Jordaens* JULIUS S. HELD 81

F. J. B. Watson, *Wallace Collection Catalogues:  
Furniture* JAMES D. BRECKENRIDGE 83

Thomas Munro, *Toward Science in Aesthetics, and  
Art Education: Its Philosophy and Psychology* BERNARD C. HEYL 87

LIST OF BOOKS RECEIVED 92

NOTES FOR CONTRIBUTORS 93

THE ART BULLETIN is pleased to announce that The Arthur Kingsley Porter Prize for 1957 has been awarded to

Lilian M. C. Randall

for her article "Exempla as a Source of Gothic Marginal Illumination," which was published in the June issue.

The Arthur Kingsley Porter Prize was established in 1957 for the encouragement of young scholars in art historical studies. The sum of four hundred dollars will be awarded annually, or at the discretion of the Officers of the College Art Association, for an Article or Note published in THE ART BULLETIN during the year preceding the announcement of the award and judged by a committee of three to be of sound scholarship, original in content, and distinguished in presentation. Contributors of any nationality who are under 40 years of age at the time of the submission of the manuscript to the Editor are eligible.

# THE WERDEN CASKET RECONSIDERED\*

JOHN BECKWITH

**A**LMOST universally accepted as late antique ivory carving, the group of three panels known as the Werden Casket (Fig. 1) presents a number of problems, both stylistic and iconographic, which have never been satisfactorily resolved. Indeed, because late antique and early Christian monuments survive only sporadically there is little hope for a complete resolution of the iconographic problems connected with them. The attempt to localize iconographic themes has led scholars in the past to construct some startling hypotheses and to ride them roughshod over a midden of discrete styles. As a result, the use of iconography as an indication of provenance has caused the casket to be switched more than once from one side of the Mediterranean to the other, or to different parts of Europe, and has led to a marked confusion of opinion over its date.<sup>1</sup>

The purpose of this essay is to reconsider the Werden Casket from a stylistic point of view although points of iconographic detail will inevitably intrude. Briefly, the two larger panels are carved with representations of the Annunciation at the Spring,<sup>2</sup> St. Joseph's Dream Concerning the Virgin's Purity,<sup>3</sup> the Visitation,<sup>4</sup> the Entry of the Virgin into the Temple for the Trial by Ordeal

\* The material of this article was first given as a lecture at the Courtauld Institute of Art on February 5, 1957, but it has since been considerably revised. In the course of preparing the lecture and writing the article, I consulted various friends and colleagues—Monsieur Jean Bony, Dr. Hugo Buchthal, Monsieur Pierre Héliot, Mr. Peter Lasko, Dr. Otto Pächt, Professor Meyer Schapiro, Dr. Hanns Swarzenski, Professor Francis Wormald, and Dr. George Zarnecki. I should like to thank them for their many kindnesses, for their suggestions, and for the time they have devoted to fruitful discussion. I should like also to express my appreciation for the following photographs: to Dr. Luisa Becherucci and Professor F. Rossi, of the Soprintendenza alle Gallerie, Florence, for the *Basilius Diptych*; to Professor Ernst Kühnel and Monsieur H. Landais for the Berlin-Paris five-part diptych, shared between the Kaiser Friedrich Museum and the Louvre; to Mr. Peter Lasko for the Liuthard Carving in the British Museum, and to Monsieur Jean Porcher for the Metz Bookcover in the Bibliothèque Nationale.

1. Victoria and Albert Museum, no. 149 to 149b-1866. Two panels, the front and back of the casket,  $1\frac{3}{4}'' \times 10''$  ( $4.5 \times 25.5$  cm); the third panel, one of the sides,  $1\frac{3}{4}'' \times 6''$  ( $4.5 \times 15.5$  cm). The ivory is chipped, cracked, and rubbed, though not so rubbed as might appear from a photograph; the smaller panel is considerably darker in tone than the others. There seems to be no reasonable doubt that these panels formed part of a casket; there are grooves at the sides which suggest the presence at one time of hinges or metal mounts, and there are others at the bottom of the lower panel (as seen in fig. 1). At the back of all three panels there is a long groove, presumably intended for a sliding lid.

2. There has never been any doubt that the iconography of the casket is in some respects out of the ordinary. The representation of the Annunciation at the Spring, taken from the Apocryphal Gospel of Pseudo-Matthew or the Protoevangelium of St. James, current in the West from the 5th century onwards, has been from the beginning something of a rarity. It appears in the five-part diptych, now employed as a book-cover in the Cathedral Treasury at Milan, usually assigned to the 5th or 6th centuries; in two terracotta medallions at Monza, dating from the 8th century; and in a number of Byzantine monuments of later date. Cf. Cabrol, *Dictionnaire d'archéologie chrétienne*, Paris, 1907, "Annunciation," col. 2261; G. Stuhlfauth, *Die Engel in der altchristlichen Kunst*, Freiburg i.B.,

Leipzig, and Tübingen, 1897, p. 67. Stuhlfauth noticed a similar representation on a sarcophagus at Syracuse, described by Garucci (*Storia dell'arte cristiana*, Prato, 1872-1878, v, p. 95), as Moses Striking Water from the Mountain, an interpretation preferred by E. Baldwin Smith (*Early Christian Iconography and a School of Ivory Carvers in Provence*, Princeton, 1918, p. 11), who gives examples of Byzantine manuscripts from the 9th century onwards and of mosaics at Daphni and at Constantinople (Kahriéçami).

3. There is, of course, an orthodox Gospel tradition for St. Joseph's Dream. It is to be found on a fourth century sarcophagus at Le Puy, on Maximian's Chair, and in frescoes at Antinoë. In these, however, an angel has been included in the scene; on the casket the Virgin as well as the angel appears to St. Joseph in his dream. If this reading is correct, it is unusual. Baldwin Smith, associating the figure of the Virgin with the adjacent female figure, read the two as the Departure of the Virgin from Elizabeth's House, but this, as it upsets the chronological order, is not satisfactory. Cf. J. Reil, *Die altchristlichen Bildzyklen des Lebens Jesu*, Leipzig, 1910, pp. 83-84; E. B. Smith, *op.cit.*, pp. 173-174, figs. 150, 151, 154, and p. 225.

4. Also with an orthodox Gospel tradition but with apocryphal trimmings in the person of the maid in attendance on the Virgin. With or without trimmings, the theme is illustrated on monuments whose date in the sixth century is reasonably established: in a mosaic at Parenzo, in ivories of the Maximian's Chair group. Cf. the five-part diptych forming the cover of the Evangelist of St. Lupicin in the Bibliothèque Nationale, a panel (now missing) in Maximian's Chair, W. F. Volbach, *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters*, Mainz, 1952, pl. 47, no. 145, pl. 43, no. 140; and for the mosaic at Parenzo, J. Wilpert, *Die römischen Mosaiken und Malereien der kirchlichen Bauten vom IV bis XIII Jahrhundert*, 2nd ed., Freiburg i.B., 1917, II, p. 748, fig. 313; E. B. Smith, *op.cit.*, p. 224. The city of Judah is represented by a curious structure with two tall round towers and something that looks like the apse of a church in between. Every representation of a city that I know of in late antique art features a doorway or a city-gate, and indeed it is the usual formula in early mediaeval art. The formula may be treated in various ways: as a screen, arcaded and crenellated, with a gateway in the center and towers on either side (cf. the "City-Gate" sarcophagi, *passim*); as a circular structure of walls and towers with

of the Bitter Water,<sup>5</sup> the Magi Seeing the Star, the Nativity, and the Adoration of the Magi.<sup>6</sup> The small panel is carved with three scenes connected with the Baptism of Christ: the first, on the left, refers to the report in the Gospel of St. Matthew (3:7) that the preaching of St. John the Baptist aroused so much interest that the Pharisees and the Sadducees came out to hear him; the second scene refers to St. John's reaction to this interest, and is a literal illustration of his words—"now is the axe laid to the root of the tree, therefore every tree which bringeth not forth good fruit is hewn down and cast in the fire"; the third section represents the Baptism.<sup>7</sup>

a gateway at the bottom or at the side (cf. *Fragmenta et picturae Vergiliiana*, Cod. vat. 3225, Vatican, 1930, figs. 48, 49; Rome, S. Paolo fuori le Mura, Bible of St. Callixtus, fol. 292v; for a Carolingian example, A. Boinet, *La miniature carolingienne*, pl. CXXVIIa); as a neat little complex of walls, square and round towers, and a gate (cf. H. Gerstinger, *Die wiener Genesis*, Vienna, 1931, fols. 12, 13; Codex Rossanensis, fols. 2, 14, A. Muñoz, *Il codice purpureo di Rossano e il frammento sinopense*, Rome, 1907, pls. II, XII; Codex Sinopensis, fol. 30v, A. Grabar, *Les peintures de l'Évangéliaire de Sinope*, Paris, Bibliothèque Nationale, 1948, pl. V). The formula may be considerably detailed and it may be highly schematized; the greater the simplification, however, the more the emphasis is placed on the city-gate or doorway (cf. the *Visitation* at Parenzo, where a servant is standing in a doorway, holding back a curtain). I cannot claim to be the first to be perturbed by the appearance on the casket of towers without a gate, and previous scholars have cited the isolated tower on the Brescia Casket or the turret on the Thecla Panel in the British Museum to reinforce their theories about the early date of the Werden Casket but these comparisons are not valid. The tower on the Brescia Casket is isolated and square, and the turret on the Thecla Panel is juxtaposed to a gateway; and in any case, the three objects in question have nothing stylistically in common. Strzygowski used the towers to reinforce his theories about an Asia Minor provenance for the casket. He at once thought of church architecture, pointing out that churches with towers appear in the Near East before they appear in the West (see below). Both Baldwin Smith and Lethaby were exercised by the towers on the Werden Casket; Lethaby noted that the ivory had been previously assigned to the 11th century, and that "the Romanesque character of one of the buildings which almost looks like a Rhenish church" must have been the decisive factor, and he also noticed that the towers were round like those at Ravenna (*Proc. Soc. Antiq.*, XXII, 1908, p. 234). Baldwin Smith, however, remarked that the Syrian church towers are low and square and form part of the structure at the west end of the church; in his eagerness to lay rather more than a foundation stone for a school of ivory carvers in Provence by establishing a link between Syria and Gaul he argued for a Gallic tradition of round towers (cf. *Early Christian Iconography*, pp. 229-230). Churches with apsidal round towers appear to be an invention of the north and are for the most part of advanced tenth century date: Fulda (937-948), Magdeburg (probably 955-970), and Metz (964-984). But two examples possibly earlier are known: St. Riquier, built in the late 8th century and completed in 819—though Krautheimer takes the view that these towers were added in the 10th century (ART BULLETIN, XXIV, 1942, p. 9) and Héliot, in a letter to me, is skeptical about their height and shape—and Cologne Cathedral, constructed by Hildebold in the first half of the 9th century and destroyed by fire in 1149. A miniature in the Hillinus Codex, dating from the early 11th century and executed for a Cologne patron, gives us some idea of the appearance of the cathedral. The long nave is shown without a central tower but the apse is flanked by towers (*Congrès archéologique de France*, LXXXV, 1924, p. 321; P. Clemen, *Der Dom zu Köln*, Düsseldorf, 1937, p. 37, fig. 20). It is undoubtedly the closest parallel to the structure on the Werden Casket. But I find it difficult to explain why the apse of Cologne Cathedral—or of some other church structure about whose Carolingian

plan we do not know—should be used as a symbol for the city of Judah in a Visitation scene. It is equally difficult to explain, if a shorthand symbol for a town is intended, why the universal city-gate is not used. My own assessment is, perhaps, a negative one; taking the little structure to resemble a town, the fact that it does not conform to the usual formula reinforces the theory that the Werden Casket was carved at a comparatively late date.

5. The scene following the *Visitation*, which shows the Virgin led towards a temple by an angel pointing to a star and a man with an open book, has been interpreted in various ways. Reil (*op.cit.*, p. 84) suggested the Annunciation of the Birth of St. John the Baptist; Stuhlfauth (*Die altchristliche Elfenbeinplastik*, Freiburg i.B. and Leipzig, 1896, p. 72) offered the Annunciation of the Birth of Mary to Zacharias; de Waal (*Röm. Quart.*, I, p. 185) and Leclercq (in Cabrol, *Dictionnaire*, "Apocryphes," col. 2557) preferred the Presentation of the Virgin at the Temple, and this interpretation has been supported by E. B. Smith (*op.cit.*, p. 223), Delbrück ("Das fünfteilige Diptychon in Mailand," *Bonner Jahrbücher*, CLI, 1951, pp. 98-99), and Volbach (*op.cit.*, p. 61). But none of these readings quite convinces, and two of them violate the chronology. Longhurst (*Catalogue of Carvings in Ivory*, Victoria and Albert Museum, London, 1927, Part I, p. 32) decided upon another interpretation, which refers again to the purity of the Virgin and, based on the apocryphal Gospels, depicts the Entry of the Virgin into the Temple for the Trial by Ordeal of the Bitter Water. A similar, though not identical, scene occurs on the Milan five-part diptych and in the Maximian's Chair group of ivories. In the latter the Virgin holds a cup or bowl in her hands.

6. The iconography of the second panel presents fewer oddities. There are numerous versions of the Magi Seeing the Star, the Nativity, and the Adoration of the Magi even in the late antique period; no one would deny that the types on the casket were current in the West and that the representation of the Nativity with the crib under a wooden shelter and with the Virgin and St. Joseph seated on either side would seem to be a predominantly Western formula (cf. E. B. Smith, *op.cit.*, pp. 15ff. and 226); on the Adoration of the Magi, cf. also, H. Kehler, *Die Heiligen drei Könige*, Leipzig, 1909, II, p. 28, fig. 16, pp. 29-31; F. Cumont, "L'Adoration des mages et l'art triomphal de Rome," *Atti della Pontificia Accademia Romana di Archeologia*, Serie III, Memorie III, 1932-1933, pp. 81ff.

7. Cf. J. Strzygowski, *Iconographie der Taufe Christi*, Munich, 1885, p. 21; E. B. Smith, *op.cit.*, p. 74, 227, with some curious and unacceptable theories on the cruciform nimbus of Christ, pp. 76-77. Sir Francis Oppenheimer (*Frankish Themes and Problems*, London, 1952, pp. 142ff.) has produced the ingenious though equally unacceptable theory that the central scene refers to a Druidical ceremony and/or the hewing down of a tree and a vine under which Queen Theodolinda rested and which were cut down to prepare the site for the erection of her oraculum at Monza. More important is the fact that neither the first nor the second scene have parallels in late antique art, although they occur in various forms after the 9th century in Byzantine manuscripts and in mosaic at San Marco, Venice. In these examples, quoted by Strzygowski, the theme of the axe and the scene of the Baptism are telescoped into one, and the axe is shown either laid against the

The casket was first noticed by De Rossi, writing in 1865 in connection with the iconography of St. Joseph; he referred to the ivories from the Monastery of Werden, made a distinction between the Werden Casket and the Werden Pyx, and compared the casket, which he dated in the sixth century, with the Milan Diptych (Figs. 2 and 3), which he dated in the fifth century.<sup>8</sup> In 1866 the casket, as part of the Webb Collection, came to the Victoria and Albert Museum and was published by Maskell in 1872, without reference to Werden, as Byzantine, eleventh century.<sup>9</sup> Westwood, in 1876, thought it to be Italian, sixth or seventh century, and believed it to have been executed by the artist of the great Milan Bookcover, but made no reference to Werden.<sup>10</sup> Garucci, in 1880, also compared it to the Milan Bookcover or diptych and mentioned that the three pieces of the Werden Casket had been brought from Werden to Paris where they had been bought by Prince Soltikoff.<sup>11</sup> From 1890 onwards, Schmid, Stuhlfauth, Kehrer, Reil, Haseloff, Dalton, and many others all repeated the comparison with the Milan Diptych, and, except Haseloff, who argued for Rome,<sup>12</sup> all advocated as the source of the casket a workshop in Milan in the fifth or sixth centuries. Wulff, on the other hand, saw in the two works strong Syro-Palestinian influence.<sup>13</sup> Strzygowski, after an attribution to Milan in one publication, finally accepted Asia Minor.<sup>14</sup> E. B. Smith wrote at length in favor of a school in Provence.<sup>15</sup> Lethaby considered the Milan Diptych, the Werden Casket, and some panels from a casket in the British Museum with scenes from the lives of Moses, St. Peter, and St. Paul to be nearly of the same date and to have the

tree or splicing it. The type of Baptism on the casket, with the personification of the Jordan, is of course to be found on a number of monuments dating from the 5th and 6th centuries. Most important of all, perhaps, is the fact that by interrupting a historical narrative with the insertion of a literal illustration of a text the panel is more in sympathy with the Utrecht Psalter than with any Byzantine manuscript.

8. G. B. de Rossi, "Delle imagine di S. Giuseppe nei monumenti dei primi cinque secoli," *Bulletino di archeologia cristiana*, III, 1865, pp. 25ff.

9. W. Maskell, *Ancient and Mediaeval Ivories in the South Kensington Museum*, London, 1872, p. 67.

10. J. O. Westwood, *Fictile Ivory Casts in the South Kensington Museum*, London, 1876, pp. 41-43.

11. Garucci, *Storia*, 1880, vi, pl. 447.

12. M. Schmid, *Die Darstellung der Geburt Christi in der bildenden Kunst*, Stuttgart, 1890, pp. 35-36. The casket was placed in a group headed "Westrom, 500-800" which included the Milan Diptych, Maximian's Chair, pyxides at Rouen, Werden, Vienna, Berlin (ex Minden), and a relief in the University Museum, Bologna. Schmid (p. 109) considered the Milan Diptych and the Werden Casket to be of the same school and period (Milan?, possibly 6th century) but not necessarily by the same artist. G. Stuhlfauth (*Die altchristliche Elfenbeinplastik*, pp. 71ff.), also considers casket and diptych to be from the same school (Milan), dates the latter to the second half of the fifth century and the casket to the first quarter of the sixth century, relates a fragment of a five-part diptych now in Berlin, a fragment from Nevers, and the Florence, Werden, and Rouen pyxides; H. Kehrer (*op.cit.*, pp. 29-31), relates the casket to the Milan Diptych, dated to the beginning of the fifth century, lists it under the heading "South Gallic of first Syro-Hellenistic type," and compares it with sarcophagus reliefs in the Musée Lapidaire, Arles, and at S. Celso, Milan; Reil (*op.cit.*, pp. 83ff.) accepts the 6th century dating and relates the casket to the Milan Diptych; A. Haseloff ("Ein altchristliches Relief aus der Blütezeit römischer Elfenbeinschnitzerei," *Jbh. d. K. preuss. Kunstsamm.* xxiv, 1903, p. 47); O. Dalton (*Catalogue of Ivories . . . British Museum*, London, 1909, pp. 6-8), considers no. 9 to be probably of the same provenance as the ivories grouped around the Milan Diptych, dates it in the 5th century, and says that the Western origin was probable; elsewhere (*Byzantine Art*

and Archaeology

Oxford, 1911, pp. 202-203 and perhaps in Catalogue, no. 9), he implies a 6th century dating for the group—Milan Diptych, Werden Casket, Berlin Panel, Nevers and Toulouse (now Paris) Panels, Florence, Rouen, and Werden Pyxides—and notes features suggesting oriental provenance, but the *Nativity* on the Werden Casket he accepts as a Western type; *idem*, *East Christian Art*, Oxford, 1925, pp. 204ff.; E. Capps, "The Style of the Consular Diptychs," *ART BULLETIN*, x, 1927-1928, p. 65.

13. O. Wulff ("Ein Gang durch die Geschichte der altchristliche Kunst," *Repertorium für Kunsthissenschaft*, xxxv, 1912, p. 220), considered that both the Milan Diptych and the Werden Casket were some decades later than the Brescia Lipsanothek ("an der Entstehung der Lipsanothek um mitte des 4. Jahrhunderts bleibt da kein Zweifel mehr") and that they showed strong Palestinian influence, in conjunction with the doors of S. Sabina, the Munich *Ascension*, the Trivulzio *Maries*, the British Museum Passion panels, and the Milan Passion Diptych; (*idem*, "Die altchristliche Kunst von ihren Anfängen bis zur Mitte des ersten Jahrtausends," [Handbuch der Kunsthissenschaft, III, 1], Berlin, 1913, pp. 185ff.).

14. J. Strzygowski (*Das Etschmidzin-Evangeliar* [Byzantinische Denkmäler, 1], Vienna, 1891, pp. 44ff.) followed Schmid in considering the casket and the Milan Diptych to be dependent on early Christian sarcophagi and to be from the same school (Milan?), related to the Lorsch Gospel Covers, especially the *Nativity* and the *Adoration*; elsewhere (*Klein-asiens. Ein Neuland der Kunstgeschichte*, Leipzig, 1903, pp. 198ff.), he argued for an Asia Minor provenance for the Werden Casket (the long-haired, beardless Christ in the *Baptism* and the church façade with two flanking towers are considered to be clues). On the tower façade (cf. also pp. 213ff.) he cites the architectural setting for the scene of Christ as Teacher on the Brescia Lipsanothek and believes this setting to be possible only in Asia Minor.

15. E. B. Smith, *Early Christian Iconography*, *passim*, but esp. pp. 221-231; *idem*, "A Source of Mediaeval Style in France," *Art Studies*, II, 1924, p. 85; A. C. Soper, "The Italo-Gallic School of Early Christian Art," *ART BULLETIN*, xx, 1938, pp. 145ff.; L. Grodecki, *Ivoires français*, Paris, 1947, p. 32, and pl. vi: Gaul or North Italian, second half of the 5th century.

same origin—"together," he said, "they form a well-defined group."<sup>16</sup> Sir Martin Conway suggested that the river-god representing the Jordan was of the Nile type and that the ivory must therefore be Alexandrian.<sup>17</sup> Kauffmann introduced the Brescia Casket into the discussion and thought that all three—the Werden Casket, the Milan Diptych, and the Brescia Casket—came from the same artistic circle in the fourth century.<sup>18</sup> Longhurst gave both sides of the East-West argument and hedged with the words early Christian, probably last half of the fifth century.<sup>19</sup> It was to this date that Delbrück assigned the Milan Diptych, making in 1951 the curious suggestion that the Werden Casket was earlier, about 450.<sup>20</sup> Loos-Dietz, however, refused to admit either the Diptych or the Casket into her fifth century canon,<sup>21</sup> but Cecchelli and Volbach assigned them to the beginning of the fifth century, and supposed a North Italian provenance.<sup>22</sup> Weigand, in the course of a review, included the Werden Casket among those carvings in ivory that he considered to be Carolingian copies of early Christian models. Sir Francis Oppenheimer tried to argue from a false iconographical and a pseudo-documentary standpoint that the casket had been made to the order of the Lombard king Berengar for the Church of St. John at Monza, which would place it in the late ninth century.<sup>23</sup> To sum up, the casket and the diptych, either singly or together, have been assigned to Milan, Byzantium, Rome, Palestine, Asia Minor, Provence or Gaul, Alexandria, and North Italy, and they have been dated in the fourth, early, middle and late fifth, sixth, seventh, late ninth, and eleventh centuries.

In the course of these attributions the Werden Casket and the Milan Diptych have been compared or related to Maximian's Chair at Ravenna, dated in the middle of the sixth century, but a juxtaposition of the casket with either the front of the chair with its sizeable saints in niches, or with the sides of the chair with scenes from the life of Joseph, makes it quite evident that stylistically they have nothing to do with each other.<sup>24</sup> And a comparison of the *Annunciation* on the chair with the *Annunciation* on the Werden Casket shows that iconographically as well as stylistically they belong to different traditions.<sup>25</sup>

More than once and, in spite of a veto from Haseloff, as late as 1952, the casket has been compared with a pyx at Rouen, the Werden Pyx, and a pyx at Florence, but once again the mere juxtaposition of these objects makes it impossible to draw any but negative conclusions.<sup>26</sup> The forms on the pyxides have clearly no relation with any of the forms on the Werden Casket. Haseloff, who produced one of the most substantial essays on late antique ivory carvings, dismissed them out of hand, but in his attempt to produce a stylistic sequence issuing from a workshop in Rome from the late fourth to the late fifth century he made some equally startling comparisons. Basing his argument on fragments of a five-part diptych shared between Berlin and Paris, and assuming that a fragment representing the Adoration of the Magi at Nevers<sup>27</sup> was part of the same diptych

16. W. R. Lethaby (in *Proc. Soc. Antiq.*, XXII, 1908, pp. 234-235), dates both diptych and casket ca. 500.

17. Sir Martin Conway in *Proc. Soc. Antiq.*, XXIX, 2nd series, 1916-1917, p. 5.

18. C. M. Kauffmann, *Handbuch der christlichen Archäologie*, Paderborn, 1922, p. 538.

19. M. H. Longhurst, *op.cit.*, pp. 31-32.

20. R. Delbrück, *Antike Denkmäler*, Berlin, 1931, IV, p. 5, pls. 5-6; *idem*, *Bonner Jahrbücher*, CL, 1951, p. 98; *idem*, "Zu spätromischen Elfenbeinen des Westreichs," *Bonner Jahrbücher*, CLII, 1952, pp. 184-187; K. Wessel ("Eine Gruppe oberitalienischer Elfenbeinarbeiten," *Ibh. d. Deutsch. arch. Inst.*, LXIII-LXIV, 1948/1949 [1950], p. 113), assigned the Milan Diptych to Milan, end of the 5th century. Wessel, one of the most recent scholars to write on late antique ivory carvings, omits presumably intentionally all reference to the Werden Casket.

21. E. P. Loos-Dietz, *Vroeg-christelijke Ivoren*, Assen, 1947, p. 155.

22. C. Cecchelli (*La Cattedra di Massimiano ed altri avori romano-orientali*, Rome, R. Istituto di archeologia e storia dell'arte, s.d., fasc. VI-VII, p. 167): "L'avorio londinese spetta indubbiamente alla fine del IV, o ai primi decenni del V secolo." Volbach, *op.cit.*, p. 61, no. 118, pl. 36.

23. E. Weigand, in *Kritische Berichte*, III, 1930-1931, pp. 55f.; Sir Francis Oppenheimer, *op.cit.*, p. 143.

24. Volbach, *op.cit.*, pl. 143; Cecchelli, *op.cit.*, fasc. IV-V, pl. 19-21; Wessel, "Studien zur oströmischen Elfenbeinkultur," *Wissenschaftliche Zeitschrift der Universität Greifswald*, III, 1953-1954, pp. 1ff.

25. Cecchelli, *op.cit.*, fasc. IV-V, pl. 22.

26. Volbach, *op.cit.*, pl. 55, no. 173; pl. 54, no. 169; pl. 54, no. 171. He repeats the comparison with these pyxides.

27. Volbach, *op.cit.*, pl. 34, nos. 112, 113, 114.

(which, incidentally, he failed to compare with a similar scene on the wooden doors of Santa Sabina, dating to about 430),<sup>28</sup> he decided that all three sections had stylistic and iconographic affinities with the Milan Diptych and the Werden Casket. I think it should be enough to set a detail from the Berlin-Paris Diptych side by side with a detail from the Werden Casket (Figs. 4 and 5) to show the inadequacy of this stylistic comparison. It is, moreover, convenient to introduce here the group of panels in the British Museum (Fig. 6) showing Moses Striking the Rock, the Raising of Tabitha by St. Peter, St. Paul Reading to Thecla, and the Stoning of St. Paul, which both Wessel and Volbach<sup>29</sup> with some justification compared to the Berlin-Paris panels and to the Santa Sabina doors, dating them ca. 420-430. These same panels have also been related to the Werden Casket and the Milan Diptych—Lethaby, it will be remembered, described them as forming a “well-defined group,” but once again the coupling of the two makes little sense, and indeed, a juxtaposition of the originals (I had an opportunity for this recently) makes it clear that they belong to different worlds.<sup>30</sup> Haseloff went a great deal further in his stylistic analysis, relating the Berlin-Paris-Nevers panels, the Werden Casket, and the Milan Diptych with the magnificent Probianus Diptych, at one time also at Werden but now in the Berlin Staatsbibliothek. This bears an inscription stating that Probianus was Vicar of Rome; otherwise, nothing is known of him, but Delbrück argues fairly convincingly that he must have held office under Arcadius and Honorius between 399 and 402.<sup>31</sup> Most scholars have agreed that stylistically the Probianus Diptych should be compared to the Nicomachi-Symmachus Diptych, shared between London and Paris, which may be dated either between 382-392 or between 399-408, though the precise date, 401, of the marriage of Galla, daughter of Q. Aurelius Symmachus, to Virius Nicomachus Flavianus, both members of patrician Roman families, has also been advocated.<sup>32</sup> Whether at the beginning or at the end of the last decade of the fourth century, there seems every reason to believe that the diptychs were made in Rome. With them must be considered the Liverpool Diptych with a representation of Asklepios and Hygieia, not mentioned by Haseloff but accepted by Delbrück, Loos-Dietz, and Wessel,<sup>33</sup> and two Christian reliefs, the Trivulzio *Maries at the Tomb*<sup>34</sup> and the Munich *Ascension*.<sup>35</sup> There can be no doubt that this superb group of ivory carvings, beautiful for their nobility of subject and design and for the subtlety and quality of their execution, stands as a stylistic entity. The carvings testify to the great revival of the arts under the Emperors Theodosius and Honorius, of which the silver dish at Madrid<sup>36</sup> and the cameo of Honorius and Maria in the Rothschild Collection are further examples in the minor arts. They must be assigned to the last twelve years of the fourth century or to the very beginning of the fifth century. To this group Haseloff added the Lampadii Leaf, which most scholars would assign to ca. 425—though Delbrück suggests ca. 411 (he would assign the Munich *Ascension* to about the same time)<sup>37</sup>—and the reliefs with scenes from the Passion in the British Museum<sup>38</sup> which, undoubtedly related in style to the Probianus Diptych, seem nonetheless to be a little later in date, but not perhaps as late—425-430—as some scholars would suppose. The point I wish to stress here is that we have reasonably good

28. J. Weigand, *Das altchristliche Hauptportal am der Kirche der Hl. Sabina auf dem aventinischen Hügel, in Rom*, Treves, 1900, pl. 12; A. C. Soper, “Italo-Gallic Christian Art,” *ART BULLETIN*, XX, 1938, p. 168; R. Delbrück, “Notes on the Wooden Doors of Santa Sabina,” *ART BULLETIN*, XXXIV, 1952, p. 139.

29. K. Wessel in *Jbh. d. Deutsch. arch. Inst.*, LXIII-LXIV, 1950, pp. 131-132; Volbach, *op.cit.*, pp. 60-61, no. 117.

30. I should like to thank Mr. Peter Lasko, Department of British and Mediaeval Antiquities, British Museum, for his kindness in allowing me to set these two series of fragments side by side. The fact that the panels are almost identical in height made the comparison particularly significant; it revealed marked differences of style and technique.

31. Volbach, *op.cit.*, pl. 18, no. 62; R. Delbrück, *Die consular Diptychen und verwandte Denkmäler*, Berlin and Leipzig, 1921, pp. 250ff., no. 65.

32. Longhurst, *op.cit.*, pp. 26-27; Delbrück, *Consular Diptychen*, pp. 209ff., no. 54; Loos-Dietz, *op.cit.*, pp. 83ff.

33. Delbrück, *op.cit.*, no. 55; Loos-Dietz, *op.cit.*, pp. 90ff.; Wessel, *op.cit.*, p. 118; Volbach, *op.cit.*, pl. 15, no. 57.

34. Volbach, *op.cit.*, pl. 33, no. 111.

35. *Ibid.*, pl. 33, no. 110.

36. Delbrück, *Consular Diptychen*, no. 62, p. 235.

37. Delbrück, *Bonner Jahrbücher*, CLII, 1952, p. 173.

38. Wessel, *op.cit.*, p. 125; Loos-Dietz, *op.cit.*, pp. 110ff.; Volbach, *op.cit.*, pl. 35, no. 116; Dalton, *Catalogue*, pl. 4.

standards by which to judge early fifth century style in ivory carvings and these do not seem to apply either to the Milan Diptych or to the Werden Casket.

To stress the decline in style in the fifth century, Haseloff contrasted the style of the Probus Diptych, dated 406,<sup>39</sup> with the obvious deterioration in quality seen in the Basilius Diptych of 480,<sup>40</sup> carved four years after the abdication of the last Roman Emperor, and in the Boethius Diptych, dated 487.<sup>41</sup> He decided that the Milan Diptych must be grouped with these latter ones, an opinion supported by Delbrück.<sup>42</sup> But I find this comparison unconvincing. Admittedly, the carving of the pilasters on the Boethius Diptych is not dissimilar from that on the Milan Diptych, but there is very little affinity in the figure style. The flatness of form combined with a harshness and jagged sharpness of contours in both the Basilius (Fig. 7) and the Boethius Diptychs is quite foreign to the Milan Diptych, and a delicacy of carving of the garlanded busts in the latter is remote enough from the heavy-handed stylization of the former. The consular diptychs appear to be provincial copies of something that has gone before; the Milan Diptych still retains the freshness of form that suggests contact with a vital artistic center. It is not without interest to compare the dry stiffness of the little figures on the lower right of the Basilius Diptych (Fig. 8) with the fluidity of movement and gesture—though it is a fluidity on the verge of congealing—in the Milan Diptych. And the forms of the consular diptychs are remote indeed from anything on the Werden Casket. It would seem, then, that as far as the ivory carvings are concerned, casket and diptych must be taken together and placed outside the fifth century. But before this connection is broken, and before turning away altogether from the fifth century, it is important to note that whenever the Milan Diptych and the Werden Casket are mentioned, the student is referred to the sarcophagi, though as a rule never specifically.<sup>43</sup>

Both Baldwin Smith and Volbach, however, made a precise comparison between the Werden Casket and a Gallic sarcophagus.<sup>44</sup> They decided that the scene on the casket representing Joseph's Dream was paralleled on a sarcophagus at Le Puy, dating probably from the fourth century. But a glance at the ivory together with the sarcophagus shows that while it may be true that St. Joseph dreams on both, stylistically they are different. The figures on the sarcophagus are heavier, and crowded more closely together; not even the pose and treatment of the dreamer bear any resemblance to the figure on the Casket. Throughout a survey of the Gallic sarcophagi this disparity of style is constant.<sup>45</sup>

It is probable that the *Adoration of the Magi* has been the basis of many of the comparisons between the sarcophagi and the casket but, if so, the basis of the comparison has been iconographic rather than stylistic. If the style of the casket is compared with the style of three reasonably dated examples of Italian sarcophagi, and a fourth example less securely dated, the difference is evident. In the Adoration scene on the Sarcophagus of Aurelius in a cemetery near San Lorenzo in Rome<sup>46</sup> dating from the third decade of the fourth century, it will be seen that the figure style is a great deal more solid, the forms are fleshier, the features of the face precisely and firmly delineated, the

39. Volbach, *op.cit.*, pl. 1, no. 1.

40. *Ibid.*, pl. 3, no. 5.

41. *Ibid.*, pl. 2, no. 6.

42. Delbrück, *Antike Denkmäler*, IV, p. 5; *idem*, *Bonner Jahrbücher*, CLII, 1952, p. 184.

43. Schmid, Stuhlfauth, Kehrer, Haseloff, and Strzygowski all made more or less general references to early Christian sarcophagi; H. von Schönebeck, in *Jbh. d. Deutsch. arch. Inst.*, XLVII, 1932, p. 111, fig. 8, compares details of iconography on the Werden Casket with a sarcophagus at St. Guilhem, which he dates in the fourth century.

44. E. B. Smith, *op.cit.*, pp. 173, 225; Volbach, *op.cit.*, p. 61; E. Le Blant, *Les sarcophages chrétiens de Gaule*, Paris,

1886, pl. 17, 4.

45. Le Blant, *op.cit.*, *passim*; F. Benoit, *Sarcophages paléo-chrétiens d'Arles et de Marseille*, Paris, 1954, *passim*.

46. G. Wilpert, *I sarcofagi cristiani antichi*, Rome, 1929, II, pl. CLXXIX, 2; G. Bovini, *I sarcofagi paleocristiani*, Rome, 1949, p. 193, fig. 197; cf. also, M. Lawrence, "City Gate Sarcophagi," *ART BULLETIN*, X, 1927-1928, pp. 1ff.; *idem*, "Columnar Sarcophagi in the Latin West," *ART BULLETIN*, XIV, 1932, pp. 140, 173, 174; G. Belvederi, "Il sarcofago di Sant'Ambrogio," *Ambrosiana, scritti di storia, archeologia, ed arte*, Milan, 1942, pp. 177ff.; A. Katzenellenbogen, "The Sarcophagus in S.Ambrogio and St.Ambrose," *ART BULLETIN*, XXIX, 1947, pp. 249ff.

gestures rather measured.<sup>47</sup> On the so-called Sarcophagus of Stilicho in Sant' Ambrogio, Milan,<sup>48</sup> dating from the end of the fourth century (von Schönbeck argues very convincingly for a date between 387 and 390), the figure style is quite unlike that of the Werden Casket. The solid, measured rhythms of the figures on the sarcophagus, which foreshadow the scene on the wooden doors of Santa Sabina and the ivory panel of the Adoration at Nevers, are remote indeed from the nervous, sketchy, almost calligraphic style of the casket. And the same stylistic distinction applies to the *Adoration* on a magnificent sarcophagus of the Honorian period—the late fourth and early fifth century—that of Catervius, Septimia Severina, and Bassus<sup>49</sup> in the Cathedral of Tolentino. Not only by comparison with Honorian ivory carvings but also by comparison with Honorian sarcophagi, it would seem that Cecchelli's and Volbach's dating of the Werden Casket in the beginning of the fifth century is totally unacceptable. In these sarcophagi the Magi sometimes face the Virgin or, as on the Catervius Sarcophagus and on the Werden Casket, the second Magus looks back over his shoulder. This particular detail is by no means an isolated phenomenon. One of the best-known examples is on a sarcophagus at Ravenna, supposedly that of the Exarch Isaac<sup>50</sup>—but it seems clear that it was used again in the first half of the seventh century to receive him—and Bovini would appear to date the case, as opposed to the cover, in the second half of the fifth century. Here again, though the iconographical formula is close to that of the casket, the style is different: the representations of the Virgin and Child should be contrasted, and the heavy, frozen movement of the Magi on the sarcophagus with the light, almost bubbling vitality of the Magi on the casket, and always the massive solidity of the late antique form with the equations of form in movement on the ivory. Comparisons with the sarcophagi of the fourth and fifth centuries stress, in fact, the differences rather than confirm the affinities.<sup>51</sup> It would seem that once more we are thrown back upon a comparison with the Milan Diptych. But even here the almost universally accepted theory that the casket and the diptych go, so to speak, hand in hand, will not stand the test of a close scrutiny. Quite apart from the iconography, which does not tally nearly so well as supposed, the style of the Milan Diptych is completely different from the style of the Werden Casket.<sup>52</sup> The forms on the diptych still retain the late antique solidity, combined with precision of detail, so reminiscent of the sarcophagi and the consular diptychs. The Magi are stolid, thickset, and movement is frozen in a stiff, rubbery gesture: there is none of the light, springing vivacity of the Werden Magi. Baldwin Smith was not unaware of this and pointed out that "the vitality and movement might suggest Carolingian more than classical feeling."<sup>53</sup> The Magi on the diptych wear Phrygian caps perched on their long hair (Fig. 9); on the casket, the carver has shaped the heads of the Magi to the echo of a cap, but no cap is worn and the hair fits

47. R. Delbrück, *Probleme der Lipsianothek in Brescia*, Bonn, 1952, p. 67; Katzenellenbogen, *op.cit.*, pp. 253-254, 258.

48. Wilpert, *I sarcofagi*, II, pl. CLXXXVIII, 2; H. von Schönbeck, *Der mailänder Sarkophag und seine Nachfolge*, Vatican, 1935, p. 104; Bovini, *op.cit.*, p. 235, fig. 252.

49. Wilpert, *I sarcofagi*, I, pl. LXXXIII, 2; von Schönbeck, *Der mailänder Sarkophag*, p. 115; Bovini, *op.cit.*, p. 242.

50. M. Lawrence, *The Sarcophagi of Ravenna* (College Art Association Monograph, 2), 1945, pp. 9-11, fig. 12; G. Bovini, *Sarcofagi paleocristiani di Ravenna*, Vatican, 1954, pp. 49-53, figs., 36-40. He does not state an exact date, and I assume that he considers an attribution to the second half of the century from the chronological order of the series.

51. It is perhaps well to point out here that the style of the fifth century ambo with a representation of the Adoration of the Magi, formerly at Salonika, now in the Museum of Antiquities, Istanbul, has no bearing on the style of the Werden Casket. (Cf. Duchesne and Bayet, *Mémoire sur une mission au Mont Athos*, Paris, 1876, pp. 249ff., pls. I-IV; G. de Jérphanion, "L'Ambo de Salonique, l'Arc de Galère et l'Ambo de

Thèbes," *Atti della Pontificia Accademia Romana di Archeologia*, Serie III, Memorie III, 1932-1933, pp. 107ff.), argues convincingly for a date ca. 440-450 for the ambo, but as far as the reproduction of the object is concerned, it is better to refer to the earlier publication.

52. The following scenes do not occur on the Milan Diptych: St. Joseph's Dream, the Visitation, the Pharisees and the Sadducees Leaving the City, the Axe Laid to the Root of the Tree. There are marked differences of style and in the composition of the scene in the Annunciation, the Trial by Ordeal, the Magi Beholding the Star, the Nativity, the Adoration, and the Baptism.

53. The size of the small panels of the Milan Diptych is greater— $2\frac{3}{4}$  inches (7 cm) in height as opposed to  $1\frac{3}{4}$  inches (4.5 cm) in the height of the casket panels. The total effect, of course, is much larger in scale.

53. E. B. Smith, "A Source of Mediaeval Style in France," *Art Studies*, II, 1924, p. 87. In *Early Christian Iconography*, p. 231, he had previously noted "the exaggerated animation and movement, which were later apparent in Carolingian art."

like a basin onto the skull (Fig. 10). This treatment of the hair occurs only in the figures of the Magi, and it would seem that the carver had not fully understood the model before him.<sup>54</sup> Moreover, a comparison of the way in which the Magi stand in the two carvings is not without interest. On the Milan Diptych the Magi stand on the frame of the panel, and in this they conform to all late antique representations known to me. Whether it is in mosaic, ivory, or on a sarcophagus, the Magi either stand on the straight line of the ground or on the ledge of the frame. They do not stand on steppingstones as represented on the Casket. These steppingstones, repeated three times, are an important feature. No late antique artist, when depicting this scene, seems to have stylized the ground in this way, or to have made so rigid a pattern repeat.<sup>55</sup> This manner of treating space, or the ground, is surely a Carolingian adaptation, or misunderstanding, of the late antique model. An interesting example is to be found in a ninth century Terence manuscript, probably executed in the Rhine-Maas area, and now in the Biblioteca Ambrosiana.<sup>56</sup> It is a manuscript about the date and origin of which there has been considerable doubt; it has been assigned to Reims, Orleans, and a German scriptorium, and it has been assigned in the ninth and early tenth centuries. In almost every scene the characters in the comedies are placed on little isolated bumps of ground, and the drawing approaches the nervous, sketchy, calligraphic gestures of the figures on the casket. Perching figures on isolated bumps of ground is a characteristic of the Drogo Sacramentary. In the initial "O," fol. 38, in which the Virgin is presenting the Child to Simeon, the Virgin is standing on a rise of ground for no apparent reason since she is meant to be inside the Temple.<sup>57</sup> It occurs on a Metz ivory of rather later date,<sup>58</sup> where angels are made to perch on sudden rises of ground. On stylistic grounds I think that Metz must be ruled out for the source of the Werden Casket, although the early Metz style of an ivory carving in the Bibliothèque Nationale<sup>59</sup> provides an atmosphere within which the casket may be reconsidered (Fig. 11). The representation of the Adoration of the Magi, for example, with its strong classical accent, the classical approach to the draperies, the treatment of the figures, is a useful clue. For with the vivid classical memory goes a new vivacity and lightness of touch so foreign to the late antique style. In addition, the ivory is carved in the same way. In late antique ivory reliefs the forms always rise out of the surface of the ivory either in a slow gradient—as though they were molded rather than carved—or else they stand away from the background with a firm, stolid authority. Carolingian ivory carvings have a much steeper gradient; the forms are usually uncertain in structure, but make up for this uncertainty by their dynamism and expressiveness, as in the Liuthard series.<sup>60</sup> The Liuthard group is already a *formed* Carolingian style (the difference between a *formed* Carolingian style and a mere imitator of the antique working in the Carolingian period is a distinction which has not perhaps been sufficiently stressed), but it is not without interest to compare the treatment of arms and legs, the scale of the figures, the shape of the faces and the

54. I should like to thank Professor Francis Wormald for drawing my attention to this point of detail.

55. These steppingstones are foreshadowed to a certain extent by the representation of undulating ground on fols. 6 and 7 of the Codex Rossanensis (A. Muñoz, *Codex Purpureus Rossanensis*, Rome, 1907, pls. VI, VII) but here the ground does not alter the gait of the Apostles; a closer parallel may be found in the miniature showing Judas returning the thirty pieces of silver, fol. 15 (Muñoz, pl. XIII), where one foot is placed on a mound, but in this case there is no pattern repeat, the landscape is still illusionistic and the figure style entirely different. Cf. also, M. S. Bumim, *Space in Mediaeval Painting and the Forerunners of Perspective*, New York, 1940, pp. 44ff., and esp. pp. 58-61.

The formula of placing small platforms of ground underneath isolated figures is not unknown in the late antique period, cf. under a gladiator in the Liverpool *Venatio* (Volbach, *op-*

*cit.*, pl. 19, no. 59), but the rise of ground is carved with considerable subtlety, a quality conspicuously lacking in the Werden Casket, and there is no repeat. I am most grateful to Professor Meyer Schapiro for a rewarding discussion on problems of space in late antique and early mediaeval artifacts.

56. Ambros. lat. H. 75 inf. cf. L. W. Jones and C. R. Morey, *The Miniatures of the Manuscripts of Terence*, Princeton University Press, 1932, I, pp. 102ff.; II, figs. 262, 272, 313.

57. A. Boinet, *La miniature carolingienne*, Paris, 1913, pl. LXXXIX, c.

58. A. Goldschmidt, *Die Elfenbeinskulpturen aus der Zeit der karolingischen und sächsischen Kaiser*, Berlin, 1914, I, pl. XXXIII, no. 80b, a bookcover in the Louvre.

59. Goldschmidt, *op.cit.*, pl. XXIX, no. 72, Paris, Bibl. Nat., Cod. lat. 9393.

60. *Ibid.*, pls. XIX-XXII.

sketchiness of the features with the carving of the Werden Casket (Figs. 12, 13),<sup>61</sup> and then contrast this treatment with a Roman copy of a Constantinopolitan model carved in the Visigothic period (Figs. 14, 16). The Orestes Diptych<sup>62</sup> is a rough, obviously provincial version but it retains the fleshy forms of the original and even the smaller figures have little in common with the Werden Casket. The diptych is a sixth century copy, and it is clear that by 530 the native Italian tradition of the late antique had given way to Constantinople.

The prevalent style at Constantinople in the sixth century may be reasonably well charted with the help of the consular diptychs and other ivory carvings and I think that it may be assumed that, in general, work done in the provinces would be dependent upon the metropolitan canons—an assumption which I believe may be applied to Maximian's Chair, wherever it was made. One of the diptychs probably issued by Magnus in 518<sup>63</sup> surely reflects the serene elegance of early sixth century style in Constantinople. The treatment of the drapery, particularly the fall of the drapery over the feet of the personifications of Rome and Constantinople on the right-hand leaf, the carving of the face of the consul and the detail of his dress, establish a masterpiece of sixth century art and stress all the more the journeyman's work of Italian diptychs like the Orestes or, even before, those of Boethius and Basilius. Another example of metropolitan quality in the sixth century may be seen in the leaf with a representation of an Archangel in the British Museum<sup>64</sup> wherein sublime indifference to spatial laws combines with nobility of concept of form and mastery of execution. But the diptych of Flavius Anastasius,<sup>65</sup> issued in 517 at Constantinople, offers a particularly illuminating contrast with the Werden Casket in the artist's approach to the small-scale human figure. These sixth century diptychs still retain the massive authority of the late antique tradition. The central figure of the consul may be flattened into a hieratic symbol of power but still the outside edge of line, which defines the symbol, is never for a moment hesitant. And the carving of the incidental ornament is equally detailed and precise. The subordinate figures, however, in the lower register of the relief, lead to the nub of the contrast; these Amazons (Figs. 15, 17), athletes, and clowns from the Circus have none of the indecisive, smudgy carving found on the Werden Casket. The approach to the carving of The *Baptism* (Fig. 4) is surely poles apart from the carving of the patronizing athlete on the Anastasius relief (Fig. 15). In the latter, the figures, in spite of the small scale, are firmly modeled with all the features of the face clearly marked; and the modeling of the horses, the manner in which forms stand out from the surface of the relief is remote indeed from the weak and hesitant representations of the ox and ass in the Nativity scene on the casket (Fig. 18).

Of all the parallel scenes to be found on the Milan Diptych, the *Nativity* is undoubtedly one of the closest to the Werden Casket (Fig. 19). St. Joseph is seated on rocky ground, holding a saw; the Virgin, also seated on boulders, is holding up a fold of her veil; crib and canopy of the crib are of the same type. But there are a number of differences: on the diptych the ass appears through a doorway in a brick wall, the saw in St. Joseph's hand is more clearly defined, as is the veil in the Virgin's hand. It seems to me that the carver of the Werden Casket was trying to copy a model closely allied to the Milan Diptych and did not quite know what he was doing. It is not clear in his version whether the Virgin is holding the end of her veil, which comes down only to her shoulder, or a loop of drapery, which should have continued to fall along the side of her body, as in the diptych—this long fold may clearly be seen in the Milan version. Once again, the forms in the Milan Diptych are all, in spite of their comparatively small scale, modeled with greater assurance; it is instructive to compare the two St. Josephs, particularly the modeling of

61. Dalton, *Catalogue*, no. 44.

62. Longhurst, *Catalogue*, p. 29. Consular Diptych of Rufus Gennadius Probus Orestes, Consul at Rome, 530.

63. Delbrück, *Consular Diptychen*, no. 22.

64. Dalton, *Catalogue*, no. 11, pl. vi.

65. Longhurst, *Catalogue*, p. 28; Delbrück, *Consular Diptychen*, no. 20.

the chest and arms, the animals, and to contrast the catching up of the drapery under the left leg of the Milan Virgin with the differently turned position of the Werden Virgin, and the sketchy folds so far removed from the former.

Details of costume, generally speaking, are much more precise on the Milan Diptych. In the scene (Fig. 2) interpreted as Entry of the Virgin into the Temple for the Trial by Ordeal of the Bitter Water, the Virgin is wearing a costume of a very particular kind: a deep jeweled collar, the upper robe belted tightly at the high waistline, the hem and border of the outer robe cutting diagonally across the body, with the ends of the stole visible beneath; the hair is worn in a high knot. The closest parallel for this type of costume would appear to be in the mosaics at Sant' Apollinare Nuovo in Ravenna,<sup>66</sup> where the Virgin Martyrs in procession are all dressed alike—apart from the patterns on the dresses—and in the same style as the Virgin on the Milan Diptych. The church was built by Theodoric, probably in the first decade of the sixth century, but the mosaics representing the long processions of male and female martyrs are generally agreed to date from the time of Agnellus, between 556 and 569, after the church had been transferred from the Arians to the Catholics. A date in the middle of the sixth century for the Milan Diptych seems to me very probable. But the same scene on the Werden Casket shows not only a marked difference of iconographical detail but of accents of style (Fig. 20); the temple is a structure different from the building on the Milan Diptych, a priestlike figure has been inserted, the figures are treated with greater freedom and a greater sense of rhythm, the drapery is less clearly defined with only a faint echo of the costume so readily recognized on the diptych.

Stylistically, the following details suggest a copyist in the early stages of the Carolingian revival: the sketchy, calligraphic line, the quick, nervous gestures, the repetition of formulae like the Magi on steppingstones, points of detail not understood by the copyist like the Virgin's veil and the cap-like hair of the Magi, vagueness in details of costume, and in general the totally different and uncertain outline of the details of a given scene in comparison with late antique artifacts. Technically, there is a marked difference in approach from the late antique examples to the carving of the ivory.

To suggest a precise provenance at our present stage of knowledge is, I think, impossible. The few schools isolated by Goldschmidt need careful consideration. None of those set up by him quite stands the test of time; the Ada group should be broken down into several different sequences or isolated members, some go to North Italy, others to different centers in northwest Europe, and they are not all of the Carolingian period; the Metz groups have the greatest homogeneity but here, too, amendments may be made; the Liuthard series, with its various offshoots, needs considerable reshuffling; some of them go to England, for example, in the tenth century revival. But there are other carvings to which Goldschmidt gave the vaguest attributions, some of which are Ottonian rather than Carolingian, and others which appear not to be of a formed Carolingian style. Perhaps the most important stage at first is to make more precise the distinction between those carvings which appear to be the output of a fully matured Carolingian style and those which are essays or pastiches of the late antique. In this category I would place the Werden Casket.<sup>67</sup>

66. M. van Berchem and E. Clouzot, *Mosaïques chrétiennes du IV<sup>e</sup> au X<sup>e</sup> siècle*, Geneva, 1924, p. 138, fig. 173; C. O. Nordström (*Ravennastudien*, Uppsala and Stockholm, 1953, p. 80, pls. 16, 17), suggests ca. 560.

67. Examples of Carolingian pastiche rather than formed style may be seen in Munich, Staatsbibl. lat. 23631, fol. 24r and v and fol. 197r and v (A. Boinet *La miniature carolingienne*, pls. I, II). Here it is assigned to the eighth century (?). Cf. also W. Koehler, *Belgische Kunstdenkmäler, herausgegeben von Paul Clenen*, 1923, I, p. 4. A. Boeckler ("Bildvorlagen der Reichenau," *Zeitschrift für Kunstgeschichte*, XII, 1949, p. 13), suggests an Ottonian date for this ms, and also in the

Catalogue of the Exhibition *Ars Sacra*, Munich, 1950, no. 58, he assigns it to the first quarter of the ninth century but with the qualification "wohl ottonischen Kopien einer spätantiken Vorlage, die auch im Stil so stark nachgeahmt wird, dass sie teilweise als Originale des 6. Jahrhunderts bezeichnet werden." W. Koehler ("An Illustrated Evangelistary of the Ada School and its Model," *Journal of the Warburg and Courtauld Institutes*, XV, 1952, p. 48), appears to doubt the validity of the date in the Ottonian period.

The same may be seen in the purple leaf and its relatives—fol. 17, in the Gospel-book from St. Victor in Xanten, Brussels, Bibl. roy. MS 18723—cf. H. Swarzenski, "The Xanten Purple

As for a workshop, there were a great number of monastic centers producing artifacts in northern Europe during the period of prosperity and revival of learning and the arts under Charlemagne and his immediate successors. To concentrate these works round two or three centers goes contrary to sense. I would suggest therefore that for the time being the Werden Casket should be assigned to a workshop in the Rhine-Maas or Ruhr area with a date in the first half of the ninth century. It is perhaps not without significance that it has always been known as the Werden Casket.

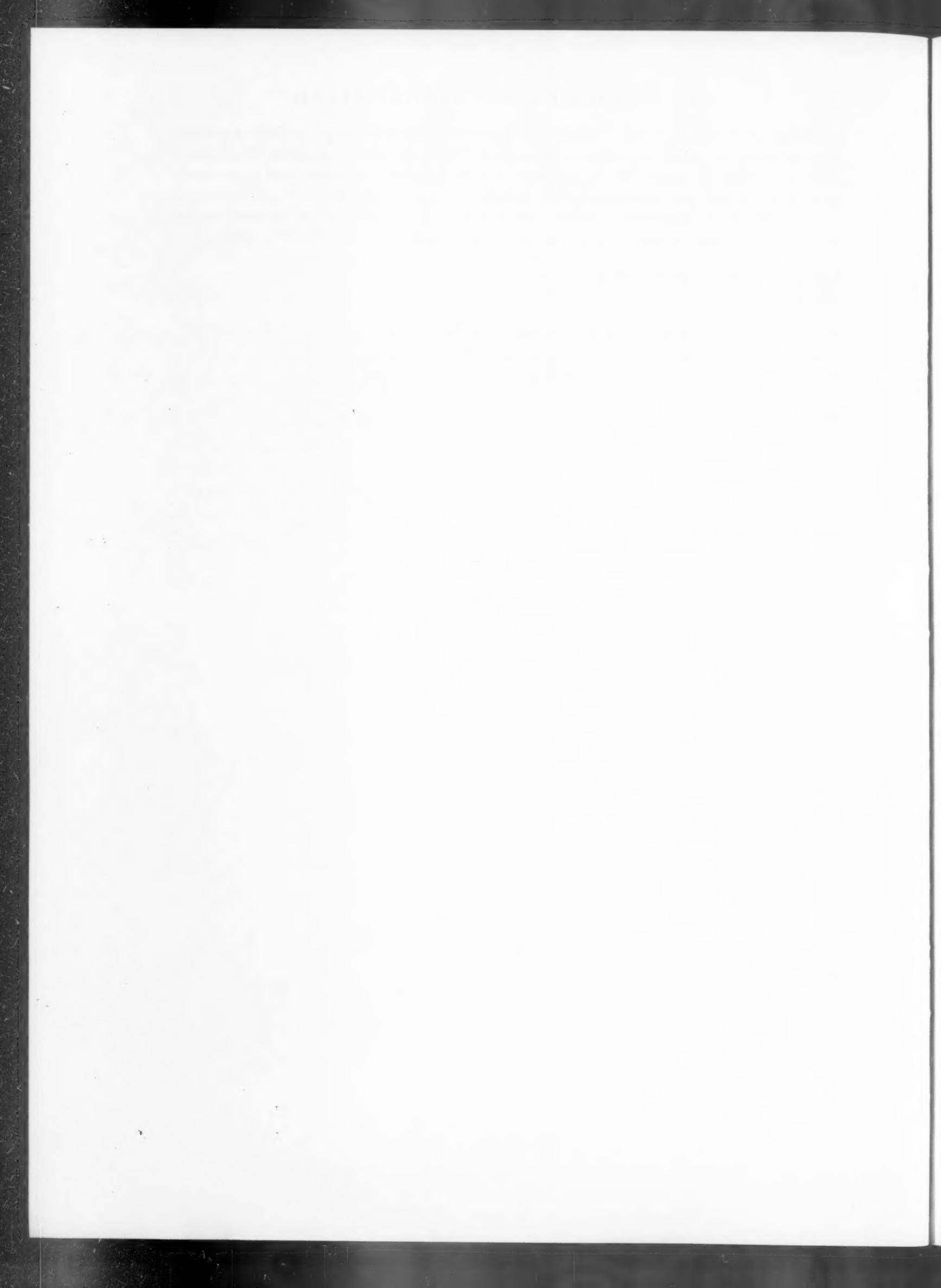
THE VICTORIA AND ALBERT MUSEUM  
LONDON

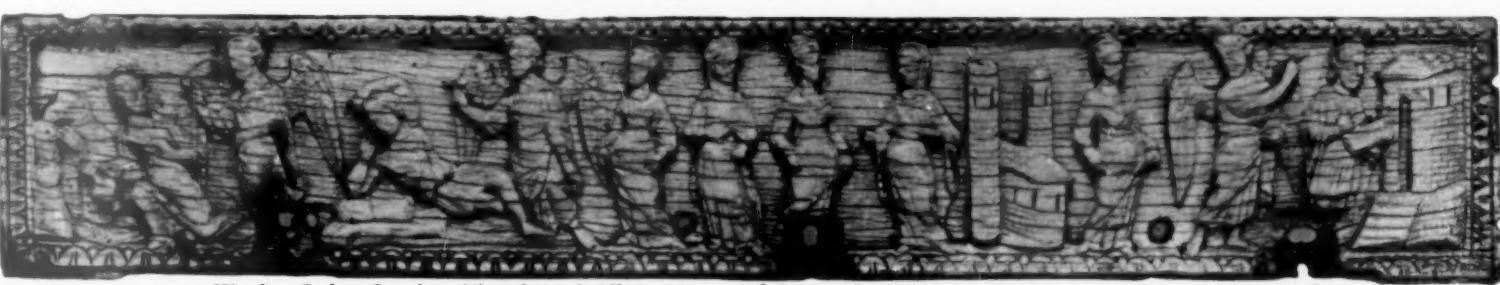
"Leaf and the Carolingian Renaissance," *ART BULLETIN*, XXII, 1940, pp. 7ff. and fig. 1.

Among ivory carvings the most striking example is the bookcover modeled on a five-part diptych, Oxford Bodleian Library (Volbach, *op.cit.*, no. 221, pl. 61) with a central panel bearing a representation of Christ Treading the Beasts. But cf. Florence, Museo Nazionale (Bargello), ivory panel, *The Denial of St. Peter* (Goldschmidt, *op.cit.*, p. 51, no. 94, pl. XL, "5th or 10th century," Volbach, *op.cit.*, no. 231, p. 99, pl. 64, "beginning of the tenth century"); Vienna, Kunsthistorisches Museum, ivory pyx with the *Nativity* and the *Adoration of the Magi*, assigned by Gombrich to the ninth century (cf. E. Gombrich, "Eine verkannte karolingische Pyxis im Wiener Kunsthistorischen Museum," *Jbh. d. Kunsthistor. Samml. in Wien*, Neue Folge, VII, 1933, p. 1); Paris, Louvre, ivory relief, *Abner and Joab by the Pool of Gibeon* (Goldschmidt, *op.cit.*, I, no. 134, p. 67, pl. LVIII); and Victoria and Albert Museum no. 47, 47a-1926, the Andrews Diptych (Longhurst, *op.cit.*, p. 30, pl. VIII), assigned by a number of scholars (Weigand, de Francovich, Volbach and Wessel), to the ninth century, and by Miss Rosenbaum to the seventh century (cf. E. Weigand in *Kritische Berichte*, III, 1930-1931,

p. 48; G. de Francovich in *Römische Jbh. für Kunstgeschichte*, VI, 1942-44, pp. 154, 161, fig. 133; Volbach, *op.cit.*, p. 100, no. 233, pl. 63; K. Wessel in *Byzantinische Zeitschrift*, L, 1957, pp. 99ff. E. Rosenbaum in *ART BULLETIN*, XXXVI, 1954, p. 253). I hope to give my reasons for reassigning this last diptych to the fifth century in a forthcoming monograph.

I should like also to draw the attention of students to the following mediaeval copies or adaptations of consular diptychs: Darmstadt, Landesmuseum, Asturius (Delbrück, *Consular Diptychen*, p. 95, no. 4); Bologna, Museo Civico, fragment of a diptych (Delbrück, *op.cit.*, pp. 165-169, no. 45); Monza, Cathedral Treasury, diptych of King David and St. Gregory (Goldschmidt, *op.cit.*, I, no. 168, pl. LXXIX, Delbrück, *op.cit.*, no. 43—both Goldschmidt and Delbrück agree that this is a sixth century diptych recarved about 900); Prague, Metropolitankapitel, fragment of a diptych (Delbrück, *op.cit.*, no. 40; Volbach, *op.cit.*, no. 40, pl. 11); and Beromünster, Stiftsschatz, diptych of St. Peter and St. Paul (Volbach, *op.cit.*, no. 157, pl. 51). Volbach assigns this last to the eighth-ninth century but a date some three hundred years later seems to me more probable.





1. Werden Casket. London, Victoria and Albert Museum (photo: Victoria and Albert Museum, Crown Copyright)



2. Left Leaf



3. Right Leaf

2-3. Five-part Diptych. Milan, Cathedral Treasury  
(From *Antike Denkmäler*, IV)



4. Werden Casket, *Baptism* (photo: Victoria and Albert Museum, Crown Copyright)



5. Five-part Diptych, *Baptism*. Berlin, Kaiser Friedrich Museum  
(photo: Courtesy Kaiser Friedrich Museum)



*Moses Striking the Rock*



*Raising of Tabitha by St. Peter*



*St. Paul Reading to Thecla and Stoning of St. Paul*

6. Group of Panels. London, British Museum (photo: Copyright Br. Mus.)



7. Basilius Diptych. Florence, Museo Nazionale  
(photo: Courtesy Soprintendenza alle Gallerie)



8. Basilius Diptych, detail (photo: Courtesy Soprintendenza alle Gallerie)



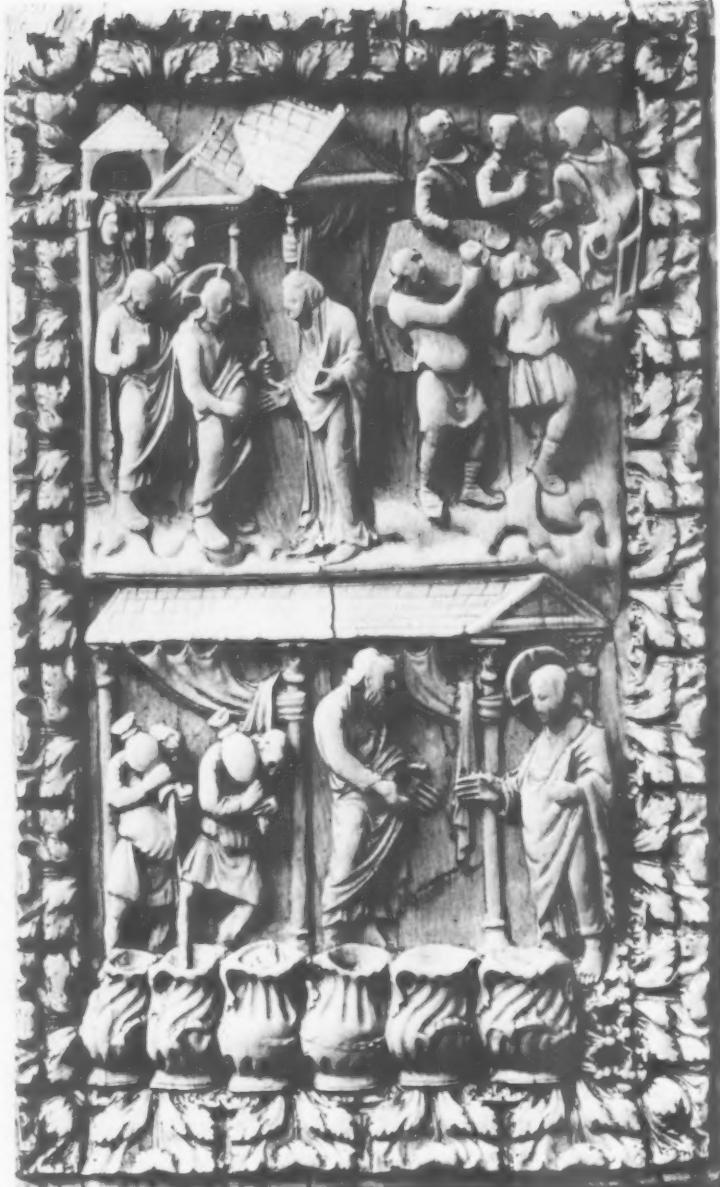
9. Milan Diptych, *Adoration of the Magi* (From *Antike Denkmäler*, iv)



10. Werden Casket, *Adoration of the Magi* (photo: Victoria and Albert Museum, Crown Copyright)



11. Bookcover, *Annunciation, Adoration of the Magi, Massacre of the Innocents*. Paris, Bibl. Nat. ms lat. 9393 (photo: Courtesy Bibl. Nat.)



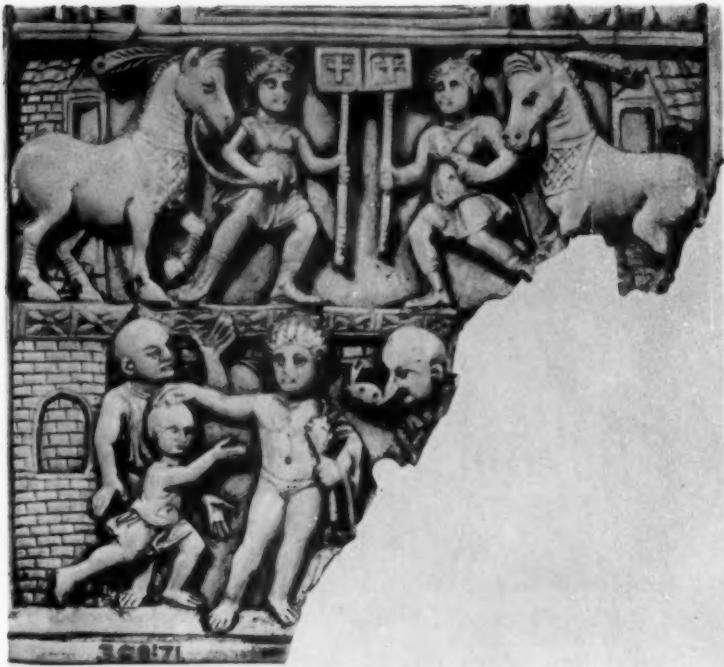
12. *Miracle at Cana*. London, British Museum  
(photo: Copyright British Museum)



13. Werden Casket, *Magi Seeing the Star* (photo: Victoria and Albert Museum, Crown Copyright)



14. Rufus Gennadius Probus Orestes Diptych. London, Victoria and Albert Museum (photo: Victoria and Albert Museum, Crown Copyright)



15. Flavius Anastasius Diptych. London, Victoria and Albert Museum (photo: Victoria and Albert Museum, Crown Copyright)



16. Orestes Diptych, Left Leaf, detail (photo: Victoria and Albert Museum, Crown Copyright)



17. Flavius Anastatius Diptych, Left Leaf (photo: Victoria and Albert Museum, Crown Copyright)



18. Werden Casket, *Nativity* (photo: Victoria and Albert Museum, Crown Copyright)



19. Milan Diptych, *Nativity* (From *Antike Denkmäler*, iv)



20. Werden Casket, *Entry of the Virgin into the Temple*  
(photo: Victoria and Albert Museum, Crown Copyright)

# UNDERDRAWINGS AND *PENTIMENTI* IN THE PICTURES OF JAN VAN EYCK\*

JULES DESNEUX

THE utilization of photographic emulsions sensitive to infra-red rays gives us the opportunity to make certain positive observations concerning the working method of that greatest of the Flemish primitives, Jan van Eyck.

In addition to the intrinsic value which the revelation of these images, hidden from the naked eye, holds for us, we may ultimately gain an insight—a reflection, as it were—of the psychological processes of the artist.

Thanks to this simple technique two observations may be stated without fear of contradiction:

- 1) The ubiquitous existence in Jan van Eyck's paintings of carefully made underdrawings;
- 2) The evidence of more or less early modified details in the original design, besides late *pentimenti* more numerous than could hitherto be surmised.

The aim of this article is to add certain important unpublished material to the sum of what is already known about the subject, and to draw such conclusions as seem necessary.

It has been arbitrarily stated that "the Flemish primitives, and Jan van Eyck in particular, never drew upon their panels; at least, no more than the principal outlines, the proportions, and here and there some shading. . . ."<sup>1</sup>

Now, however, the infra-red rays have brought to view the precise drawing that is hidden beneath the surface of many of Jan van Eyck's pictures.

This kind of drawing, which surely extended to whatever the artist intended to paint is, for instance, most apparent in draperies photographed on films sensitized to these rays. The draperies are drawn with all their folds and shadows, the relative density of the latter being indicated by groups of strokes of various length, or depth of tone.

Such drawings do not have the character of sketches. They are works complete in themselves, and their prime importance is attested by the fact that the definitive painted version superimposed upon them corresponds, as a rule, exactly to the elements of the drawing beneath.

Now, to comment on the examples herewith reproduced:

## 1. *The Madonna of Canon Vander Paele* (Figs. 3, 4)

An examination of the Virgin's mantle is particularly instructive. On infra-red photographs the entire drawing of the mantle is perfectly revealed down to the last detail. Precise in itself, it is as accurately followed in the painting, except at rare places in the lower part of the Madonna's mantle. We can, for instance, readily detect here—exactly in line with the central axis of the figure—a small but most significant change: we clearly see the original contour of a tiny, almost horizontal fold in the underdrawing which Jan van Eyck did not follow in the finished picture. Instead, he moved the fold upward a little, but without changing its shape! The deliberate contours of these two overlapping folds are perfectly brought out by the infra-red rays.

\* I am much indebted to the following museum directors and curators who gave their kind permission to publish the photographs that illustrate my text: Fr. Dr. Klauner, Vienna; Dr. Holzinger, Frankfurt; Dr. Van Beselaere, Antwerp; Dr. Janssens de Bisthoven, Bruges.

From Mr. Martin Davies in London I obtained the photo-

graphs relating to the *Arnolfini Marriage*, which are reproduced by courtesy of the Trustees of the National Gallery, London.

<sup>1</sup> J. Vanderveken, *Experimenten met betrekking tot de Van Eyck techniek* (Gentsche Bijdragen tot de Kunstgeschiedenis, Deel V), Ghent, 1938, pp. 5-14, 2 figs.

Here we have a direct echo of the artist's activity, and for this reason the detail, insignificant as it may seem in itself, is of considerable interest. At all events, it reveals the master's method of procedure.

One may also note that, while in the underdrawing the two vertical folds of the Madonna's mantle at her extreme left overlap the Canon's surplice, the reverse takes place in the finished painting.

### 2. *The Lucca Madonna* (Figs. 5, 6)

The red mantles of Jan van Eyck's Madonnas are a particularly good subject for infra-red examination. The *Lucca Madonna* presents us with another example of a complete underdrawing. There is nothing "calligraphic" about this firm drawing; the stroke is direct, rapid, and sure. There are also traces of underdrawing to be noted in the region of the Child's arms and legs, as well as the cheek and neck of the Virgin, etc., but these details are not reproduced in this article.

### 3. *The Madonna at the Fountain* (Figs. 15, 16)

This little panel bearing the date 1439, together with the portrait of the artist's wife in Bruges, of the same year, are Jan van Eyck's last dated works. Here the underdrawing revealed by the infra-red rays (Fig. 16) shows that he remained faithful to his working method to the end of his career. The structure of the Virgin's blue mantle is carefully prepared in every detail beneath the colored surface.

In passing we may note that the infra-red photograph, by isolating the figure of the Madonna as though it were a statue carved of white stone, emphasizes its quality of monumentality.

At this time we may also mention the late *pentimento* in the area between the Madonna's left ear and the Infant's right hand: her neck, originally partly covered by hair, was completely exposed in the master's final version.

The several spots of opaque black that appear prominently on the Virgin's mantle in the infra-red photograph correspond to early restorations.

Interesting as the foregoing facts may be, we shall shortly see that the infra-red photographs can teach us even more, for they demonstrate the great importance in Jan van Eyck's portraits of the underdrawing made directly on the panel.

With this in mind, let us choose two examples.

### 1. *Canon Vander Paele* (Figs. 1, 2)

Here the infra-red plate (Fig. 2) reveals a very careful underdrawing of all the essential details of the Canon's face.

All of the elements of the left side of his head (which, as is Jan van Eyck's wont, is the shaded half, illuminated by a diffuse light coming from somewhere to the spectator's left) are charted in detail, from the neck to the top of the head, the shading lines running obliquely in the general direction from upper-right to lower-left.

The density of the shading strokes varies, of course, according to the shape which they must define, their sum creating a kind of substructure, firm, yet imbued with all the subtlety of rich plastic nuances that are to be found in this extraordinary face—a face which would later emerge from the painter's brush with all the impact of veracity.

In the region of the cheek and neck the sharply etched lines and folds are rendered entirely by means of divers combinations of approximately vertical lines, varying as to length and spacing in such a way as to take the exact shapes of the forms that they define.

This might be called a "direct" form of graphic expression; but the temple of the old man, so

individual in its topography, is handled quite differently. Here the drawing consists essentially of small groups of short, parallel, diagonal strokes (hatchings) which define the forms without contour. Thus the complex local alterations so deeply engraved in the aged skin are clearly perceptible. The temple artery with its ramifications, so prominent beneath the taut skin, is likewise not rendered by continuous lines; in the infra-red photographs the arterial path emerges as the cessation of subtly disposed hatchings that define the adjacent shadows. In the painting of that part of the face, Jan van Eyck has performed a real *tour de force* in the reproduction of living nature.

Such an underdrawing cannot fail to play an essential part in enabling the artist to assign the proper value to each of the features of the sitter's physiognomy. It is a striking illustration of Focillon's acute observation in his analysis of Jan van Eyck's portraits: "chaque détail lui est révélateur de la géographie interne."<sup>2</sup> May this not be one of the secrets of that incomparable "builder of faces," Jan van Eyck?

Before taking leave of the great Bruges Altarpiece it is worth noting that the infra-red pictures also show several interesting *pentimenti*.

The first, in the region of the forehead to our left, shows a later extension—of slight degree, yet clearly perceptible—of the forehead from the eyebrow up.

The second may be found in the area of that "segmented sleeve" that covers the armor on St. George's right arm. This "sleeve" has been perceptibly widened all along its lower edge so that it encroaches upon the outline of the Canon's skull, and distinctly reduces the height of the window behind his head. This *pentimento* was added when the picture was all but complete, for the strip of window panes revealed by the infra-red is a finished piece of work.

The third *pentimento* is an important one, having to do with the direction of the Canon's gaze. This was not from the beginning as we see it today. Originally the irises occupied a more central position in the eye on the same horizontal plane.<sup>3</sup> Their quite perceptible displacement toward the sitter's right may be attributed to Jan van Eyck's desire to emphasize the "distant" quality of the gaze.

So exact is the rendition of the distortion produced by the lens of his spectacles where they overlap the text of the book of hours in the Canon's hand that we may be certain that he was near-sighted.<sup>4</sup> Now it is a well-known fact that people afflicted with myopia have this "distant" look when deprived of their glasses; thus, the donor's physical handicap could be turned to good account in that it gives him the air of a man who has suddenly been struck by some inner illumination in the course of reading the sacred text.

Thanks to his final placement of the irises, Jan van Eyck has taken full advantage of a characteristic peculiar to the myopic. It is no matter of chance that the Canon's expression is such an extraordinary masterpiece of psychology.

It remains only for us to point out the infra-red illumination of the underdrawing of St. George's left hand, at a slightly lower level than the painted version. The clearly defined image shows that originally the thumb did not encroach upon the Canon's black collar as it now does. The carefully drawn shading of the back of the hand is also worth noting.

## 2. *Portrait of Cardinal Albergati* (Figs. 11-14)

Of all Jan van Eyck's portrait subjects Canon Vander Paele was without doubt the one whose physiognomy offered the painter the greatest number of arresting features. Though Jan van Eyck

2. H. Focillon, "Le style monumental dans l'art de Jean Fouquet," *Gazette des Beaux-Arts*, 6<sup>e</sup> ser., XV, 1936, p. 28.

3. The original position of the irises appears even more clearly revealed in an x-ray photograph. The high penetrative power of the x-ray completely blots out the present position of

the irises which the infra-red rays still permit us to see.

4. J. Desneux, *Rigeur de Jean Van Eyck*, Brussels, 1951. The marked convexity of the canon's eyeballs is also characteristic of his myopia. Comparison with the normal eyes in the portrait of Cardinal Albergati is instructive.

rendered all details with scrupulous exactitude, he nevertheless, as was his wont, retained that fundamental synthetic character of the whole structure so essential to the portrayal of life.

Since the Canon lived in Bruges, Jan van Eyck had every opportunity to refer to his model in the course of perfecting his work and achieving the resemblance.<sup>5</sup>

Circumstances were surely quite different when he painted the portrait of Cardinal Albergati, now in Vienna (Fig. 12).

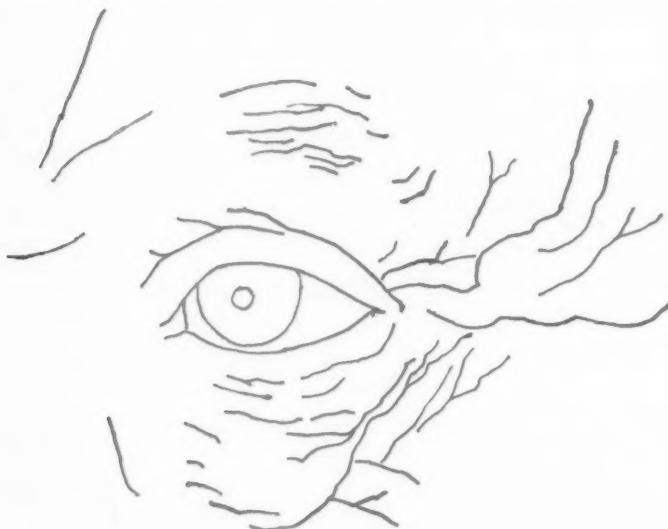
It seems superfluous here to go into the question of the prelate's identity, which has been sufficiently well established by the research of James Weale.<sup>6</sup>

In any case the drawing (Fig. 11), formerly in Dresden, is universally accepted as a portrait done from life.

It is the relationship of the two pictures that is so interesting to study: first of all by a most detailed comparison of the elements rendered by graphic means in the one, with the corresponding translations into paint in the other; and second, by the simultaneous examination of the drawing and of the images revealed by infra-red photographs beneath the surface of the painting.

For example, attentive scrutiny<sup>7</sup> and of the Vienna panel, in the area of the Cardinal's left eye, will reveal a line-for-line concordance between the two, down to the smallest detail, the tiniest wrinkle. Nor does the painting contain any supplementary figurative elements not already present in the drawing.

The enlarged photographs of this region (Figs. 13, 14) along with our linear "map" of the markings so carefully charted in the drawing (text fig. 1) make the most telling of comparisons.



1. Tracing of Lines Discernible around the Left Eye on the Drawing of Cardinal Albergati (cf. Figs. 13-14)

Similarly, the concordance of drawing and painting in the region of the right eye, the mouth—the lower part of the face in general—continues so completely and so obviously that the noticeable difference in the shape of the two foreheads—decidedly straighter and higher in the painting than in the drawing—is all the more striking. Finally this marked difference is accompanied by a divergence of psychological expression between the two faces.

It has often been noted that the drawing makes a more lifelike, a more vivid impression than the painting, but it will not be amiss to reiterate the problem and to define it more exactly.

<sup>5</sup> 5. The late *penimento* above the eyebrows, noted above, which Jan van Eyck introduced in order to broaden slightly the forehead of Canon Vander Paele may be recalled in con-

nnection with this instance.

6. James Weale, *H. and J. van Eyck*, London, 1908, p. 61.

7. *Op.cit.*, p. 57.

Friedländer has stated that the difference between the drawing and the painting can be entirely ("vollkommen") explained by the unusual circumstances under which the portrait was executed.<sup>8</sup>

This statement, which *a priori* seems perfectly acceptable, does not, however, exhaust the problem.

There is unanimous agreement that the drawing was done from life, and the still-legible notations relative to the colors written in Jan van Eyck's own hand strongly suggest that the artist did not feel certain of seeing his model again.

The accent of spontaneity in the drawing is truly extraordinary; this prompts us to believe that the artist has captured the authentic moral character of the prelate in all its intimacy, as well as his familiar physical appearance.

What we have in the drawing is indeed a completely different soul from the one that we find in the Vienna portrait!

The face in the drawing—almost peasantlike; good-humored, but with a dash of slyness—gives way in the painting to one imbued with gravity, intelligence, and dignity; added up, these qualities breathe an air of tranquil moral authority.

It is unlikely that Jan van Eyck would have overlooked such a personality-revealing detail as the carriage of a man's head. May we not suppose, then, that he deliberately bared the back of the Cardinal's neck in the painting by lowering the ermine collar of the *cappa*?<sup>9</sup>

Although the noble countenance with which the Cardinal of the painting is endowed certainly seems lifelike, how authoritative too is the drawing, with its slight tinge of lassitude in the expression of the ageing man, sitting with his head a little sunken between the shoulders.

Lack of opportunity for frequent recourse to the living model must necessarily have interfered with the artist's attainment of an exact likeness. That verisimilitude was ever one of Jan van Eyck's major concerns cannot be doubted; one has only to recall the broadening of Canon Vander Paele's forehead at the last moment in the completion of that picture.

The tangible differences between the drawn and the painted portraits of the Cardinal, however, would appear to indicate a more deliberate change. Was it not, in fact, the high dignitary of the Church, the papal legate, the negotiator of the peace, whom Jan van Eyck—perhaps with some complacency—was painting, rather than the "model of piety and humility," no doubt faithfully reflected in the Dresden drawing, that the Cardinal was reputed to have been?

Basing his calculations on the year 1431 when the Cardinal, in his capacity as papal legate for Eugene IV, journeyed through Flanders, and more specifically on the prelate's visit to Ghent and Bruges, James Weale plausibly attributes the drawing to this period.<sup>10</sup> It is impossible to say how much time elapsed between the drawing and the painting; however, the comparative analysis given above leaves no doubt regarding their intimate connection.

Moreover, infra-red exploration of the painting yields additional and decisive proof.

The underdrawing thereby revealed—only partially, it must be admitted, but covering a very important zone—is a faithful reproduction of the Dresden drawing, except for those alterations of the upper part of the head already noted above. One need only compare the precise outline of the lips or the clear definition of the shaded areas, in order to be thoroughly convinced of the intimate and basic relationship between the painting and the precious drawing from life.

Thus, it seems unjustified to imagine that the Vienna portrait could be a replica.<sup>11</sup>

8. M. J. Friedländer, *Altniederländische Malerei*, 1, Berlin, 1924, p. 90.

9. The drawing must be studied from a good, *old* photograph such as the one herein reproduced. Our enlargement of the region of the left eye shows some regrettable restorations (black stippling) made on the negative by the earlier photographer and designed to mask tears in the paper. Fortunately these do not interfere with the examination of the essential

parts, which remain well defined.

10. Millard Meiss, "Nicholas Albergati" and the Chronology of Jan Van Eyck's portraits," *Burlington Magazine*, xciv, May, 1952, p. 144, n. 42, suggested this idea on purely hypothetical grounds without postulating anything more than its possibility. With our present knowledge, however, it seems out of the question.

**The case of *The Arnolfini Marriage* (Figs. 7-10)**

The cleaning of this picture several years ago brought to view quite clearly a *pentimento* in the region of Arnolfini's right foot, showing that it had originally been placed much farther out to the side (Fig. 10). The conditions under which this *pentimento* was brought to light clearly indicate that it was made at a late stage in the picture's completion; since then Martin Davies' publication, in the *Corpus des primitifs flamands*, with its extensive photographic documentation, has provided us with much instructive material.<sup>11</sup>

Beneath the pigment layer, the infra-red rays have discovered the underdrawing in so many different places that we feel safe in assuming that this was extended to the whole picture and thus completely generalized (cf. Figs. 7-9).

Even more interesting is the discovery of numerous modifications—some of them important—which Jan van Eyck introduced into his picture at various stages of progress.

To begin with there are the initial changes in the underdrawing itself. Of these, the most striking is in the pose of Arnolfini's raised right hand. In the preliminary scheme, the superb draftsmanship of which is clearly brought to light by the infra-red rays (Fig. 8), this hand is presented in three-quarter view, with the palm and the elegant fingers turned toward us. The later change to a more "condensed" profile view involves no displacement, but simply a pivotal turn of the wrist.

Is there any need to elaborate upon the masterly perfection of that "original" hand? Its discovery provides us with one more illustration of the major importance that Jan van Eyck attached to his underdrawings.

This document truly has the same significance as a *state* in the development of an etching.

The later modifications follow one another chronologically, up to the last one which concerns a pictorial element that had, to all appearances, been quite completed.

In the area of Arnolfini's legs and feet one can find many successive modifications of pose. In the instance of his left foot, for example, there are three (Fig. 10).<sup>12</sup> These changes accurately reflect the difficulties that Jan van Eyck must have experienced in finding an entirely satisfactory stance for his model. May we not conclude that the first version (legs much farther apart) corresponded to Arnolfini's natural stance, which in the end was considered to be lacking in proper elegance?

Thus the infra-red rays enable us to make many concrete observations of inestimable importance regarding Jan van Eyck's working methods, as we have seen; furthermore, some of this knowledge can help us greatly when we turn our attention to the technical interpretation of the admirable little *St. Barbara* panel.

11. Martin Davies, *The National Gallery, London. (Les primitifs flamands: Corpus de la peinture des anciens pays-bas méridionaux, 3)*, II, 1954, pp. 117f.: "Changes in Composition: Numerous." "There are many alterations, in varying stages of completion to Arnolfini himself. In particular, his raised right hand was at first blocked in in a different position; this hand in its final position has further undergone minor alterations. Two fingers of his left hand have been drawn in to come forward over her right hand; there is also a beginning of the fingers of this hand further to the right than at present, a modification of the contour of the thumb. There are probably three positions for each of his legs; his dress has been extended at the bottom and there are changes in its outline round the shoulders, etc. His hat was once narrowed at the left especially in the crown; his right cheek has been ex-

tended over part of the hat.

"The changes noted as having been made to her are much less; it may be recorded that among changes to her right hand, the thumb was once differently placed, and that the contour of her right sleeve has been varied.

"There are further various changes in the room. For instance the frame of the mirror was once intended to be octagonal; a horizontal line above the settee indicates some change in this region; and the top part of the window shutter, near Arnolfini's head, has been changed, the intended arrangement not being clear."

12. The original position of his left foot comes to light under infra-red examination as a simple outline. The second position is a late *pentimento* including the leg.

*St. Barbara* (Figs. 17-20)

Is the *St. Barbara* in Antwerp a *préparation* for a never-completed painting or is it a finished drawing?

Left by Van Ertborn to the city of Antwerp in 1828, the precious little panel is of unique interest because of its technique.

Furthermore, the tiny picture (18½ cm x 32 cm) has come down to us in its original frame simulating red, black-veined marble, upon which one may read the inscription, *JOHES DE EYCK ME FECIT. 1437.* Properly speaking, it cannot be called a painting and has been quite generally considered as a drawing preliminary to the application of color.

This, at any rate, is the opinion of Friedländer,<sup>13</sup> De Tolnay,<sup>14</sup> Baldass,<sup>15</sup> etc., whereas others maintain that it is a completed drawing, conceived from the start as self-sufficient.<sup>16</sup>

Panofsky<sup>17</sup> has promulgated a more subtle opinion: "It [the *St. Barbara*] is not a painting but rather a meticulously detailed and finished drawing executed with the finest of brushes<sup>18</sup> on a white grounded panel, and may in fact have been commenced as a mere *préparation*. I do not believe however that it can be accepted as typical of Eyckian underdrawings; if the paint were removed from Eyckian pictures carried out in colour we could hardly expect to find a similarly detailed drawing underneath. Every early Flemish painting presupposes of course a careful but much more generalized *préparation*; such minutiae as the fine lines of the saint's hair, the details of the incidental figures or the subtleties of the architecture would have been obliterated by even the first and thinnest coat of paint, had the *St. Barbara* ever been transformed into a real picture."

Now, however, it seems possible to elucidate the question further, first of all by attentive observation of the work itself, and secondly by comparing certain of its features with similar elements in the underdrawing on finished paintings of the master, as revealed by infra-red rays.

If the *St. Barbara* were really a finished drawing, it would be hard to understand why Jan van Eyck, who was so careful to finish every last detail in his paintings, should have failed to treat all parts of the Antwerp panel with the same precision. And here, in order to avoid all ambiguity, let it be noted that if Jan van Eyck allows a falling off of definition where an otherwise minutely treated landscape recedes into the distance (cf. the *Rolin Madonna*), he does so in conformity with the laws of human vision.

Attentive study of the *St. Barbara*, however, discloses certain parts that are merely sketched in without recourse to the justification of optics. Moreover, this gives us the inestimable privilege of seeing what a *genuine sketch* by Jan van Eyck looks like.

For purposes of demonstration we shall select two sections of the picture:<sup>19</sup> 1) the landscape, with special emphasis on the section to the right of the tower; 2) the figures at work on top of the tower.

The landscape to the right of the tower (Fig. 18) shows us rows of trees, each row marking the boundary of a field—a characteristic conformation which may still be seen today in the Flemish countryside, especially between Ghent and Bruges. These trees are pollard-willows, whose unmis-

13. M. J. Friedländer, *Altniederländische Malerei*, Berlin, 1924, I, p. 62.

14. C. de Tolnay, *Le Maître de Flémalle et les frères Van Eyck*, Brussels, 1939, pp. 32, 67.

15. L. Baldass, *Jan Van Eyck*, London, 1952, p. 59.

16. L. van Puyvelde, *L'agneau mystique*, Paris & Brussels, 1946, p. 80.

17. E. Panofsky, *Early Netherlandish Painting*, Cambridge (Mass.), 1953, I, p. 185.

18. One may assume that Jan van Eyck used, among other tools, a little feather taken from the wings of woodcocks for his panel drawings. It is a traditional instrument still in use among miniature painters. This little feather, of which only

one grows on each wing, is used like a brush, the barbs playing the part of hairs. Combining the qualities of delicacy, flexibility, and resiliency, it is an incomparable instrument superior to any brush.

Silverpoint is, of course, a completely different instrument, cf. Vanderveken, *op.cit.*

19. It may be objected that photographic enlargements could end up betraying the intention of the artist whose responsibility ends with the naked eye's view of a picture in its original scale.

However, everything that we discuss in the *St. Barbara* is, with but a small outlay of attention, readily perceptible to the naked eye. The enlargements merely make things easier for purposes of demonstration.

takable silhouette is instantly recognizable in Jan van Eyck's landscape, even though it is produced each time by a dab, obviously made with a single brush stroke, of imprecise outline. These dabs of uneven density possess to the highest degree the character of a sketch. If they did not strike us so noticeably, we could compare these sketched pollard-willows with the little green trees, so minutely painted in the hilly landscape on the left side of the *Rolin Madonna*.<sup>20</sup>

This form of rapid draughting of the landscape details in the right half of the *St. Barbara* gives it a spontaneity which, coming from Jan van Eyck, is of the highest interest to us. As we shall see, however, the masons at work on top of the tower are drawn in a way that may have even more significance.

The workers on the ground level (Figs. 17, 18) are drawn with great care and with admirable understanding of their individual gestures; they show an incomparable sense of life that obviously springs from human sympathy. Here perhaps better than anywhere else one realizes that Jan van Eyck's skill in expressing form is in no way restricted by the minute scale of the figures.

At the summit of the tower (Fig. 19) the personage farthest to our right, standing arms akimbo and full of lively humor, is the only one drawn with approximately the same precision as the "architect-in-chief" down below (Fig. 18), who, with raised baton, seems to be giving him directions.

By contrast, the four busy masons outlined against the sky are treated in an entirely different manner: in each case the silhouette is recorded in a few strokes bearing the freshness of "first impulse": yet they reveal a marvelously keen understanding of each picturesque gesture. Each one demands a fuller description (Fig. 19).

The first man to our left, standing in a quite natural pose, bends over the stone block which he grasps, apparently trying to move it(?). His neighbor to the right requires more attentive observation: lying on his stomach on top of the partially-built parapet, his right leg extended somewhat to the side, he manipulates his plumbline with both hands in a pose that is natural despite its almost acrobatic appearance.

The action of his immediate neighbor, who is standing, is much less complicated, yet harder to identify, though doubtless it was meant to be quite specific.

As for the fourth laborer at the far right of this group, he is squatting; his legs are seen exactly from the front, while his body is twisted towards the right in a pose even more acrobatic than that of his companion with the plumbline! A few strokes, summary yet unequivocal, indicate that he is plying a trowel with his right hand.<sup>21</sup>

These frankly summary yet highly expressive jottings are typical of what can only be called a sketch, so direct and so spontaneous that, again, coming from the genial old Flemish master, it is truly invaluable.

Beyond this, moreover, it proves that the *St. Barbara* is not a finished work since it is inconceivable that Jan van Eyck would have been content to leave even the smallest bit of a completed work in the rough-draft stage.

It would seem sufficiently obvious from the above observations that the *St. Barbara*, despite its general appearance, is lacking (at least in the state in which Jan van Eyck left it) that integral discipline (*ostinato rigore!*) of representation which is an absolute constant in the master's painted panels and a characteristic of his genius.

It is really unthinkable that Jan van Eyck, if he had decided to make a "finished" drawing with no intention of painting over it, would deliberately have left part of it "unfinished"!

20. The landscape to the left of the tower in the *St. Barbara* contains masses of verdure of a more confused sort, and is further complicated by the presence of architectural features.

21. The enlargements emphasize the quality of Jan van Eyck's tiny figures; in mediocre works such enlargements serve merely to underline their weaknesses.

On the other hand it seems to me that the perfect state of graphic completion of the main figure (Fig. 20)—advanced as evidence in support of the “finished drawing” thesis—loses any such significance when confronted by the evidence of the infra-red examination of the painted panels. The underdrawing of the mantle of the Virgin in the *Vander Paele Madonna* or the *Lucca Madonna*, to cite only two examples, is no whit less precise than the drawing of St. Barbara’s robe.

As for the Saint’s hair, which is drawn with a real finesse, it is still less accomplished than any of the similar passages in Jan van Eyck’s paintings.

Finally, in view of the underdrawings that we are now able to see, thanks to the infra-red rays, the argument that “the drawing would have been obliterated by even the first and thinnest coat of paint”<sup>22</sup> no longer seems tenable. It would seem more reasonable to argue that Jan had intended to make a painting, in the fullest sense, of the *St. Barbara*.<sup>23</sup>

Doubtless we shall never know why the master chose to leave it in its unfinished state but, with Panofsky, I incline to believe that he did so “at the suggestion of a discriminating client.”

Moreover, one cannot help but be struck by a difference in wording that Panofsky has pointed out: whereas the inscription on the frame of the *St. Barbara* reads “JOHES DE EYCK ME FECIT. 1437,” the inscription on the frame of the little *Madonna at the Fountain* reads “JOHES DE EYCK ME FECIT + CPLEVIT ANO 1439.”

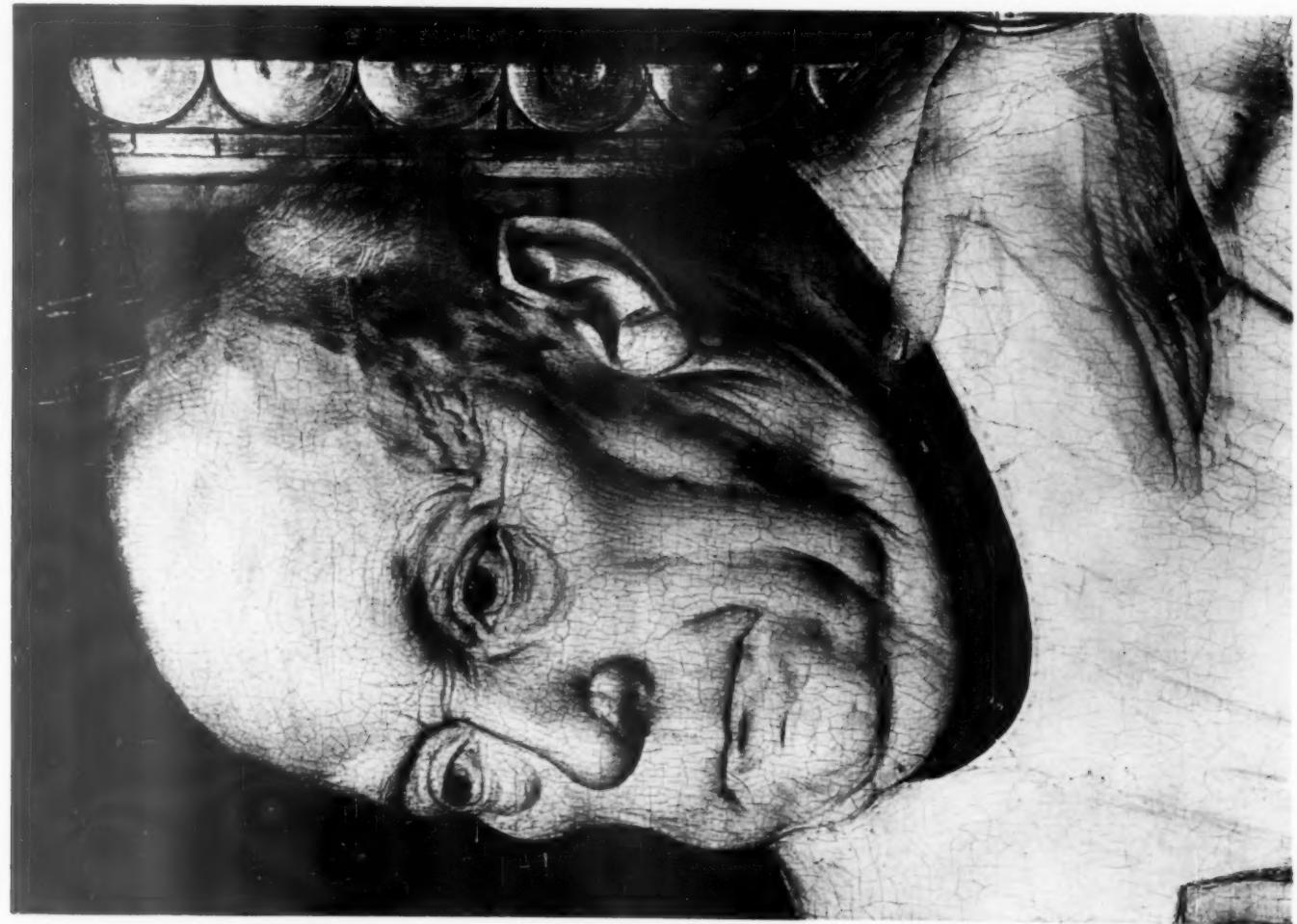
BRUSSELS, BELGIUM

22. Panofsky, *loc.cit.*

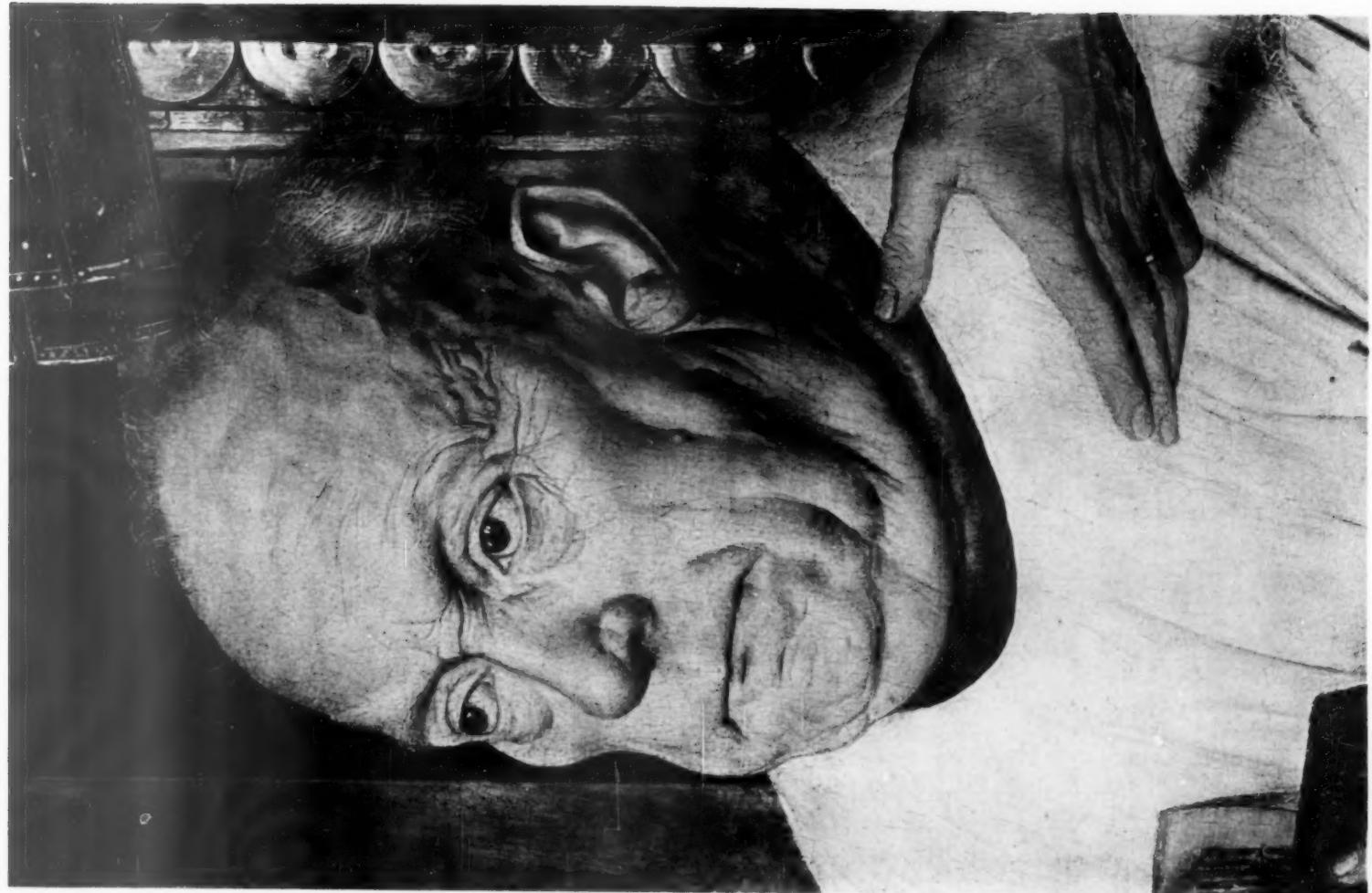
23. The *St. Barbara* is in an excellent state of preservation. Nevertheless the following may be noted: 1) A beginning was made in coloring the sky, and 2) at the far right of the tower, two of the crowning pinnacles have been reinforced with a sharp dark outline, differing in technique from the rest of the

picture. To all appearances these reinforcements were added later, after the rest of the work was stopped. Though it is impossible to confirm it, the possibility that these may be by Van Eyck’s own hand cannot be excluded. The same remark applies to the right hand of St. Barbara which has been redrawn in a few, rapid strokes.



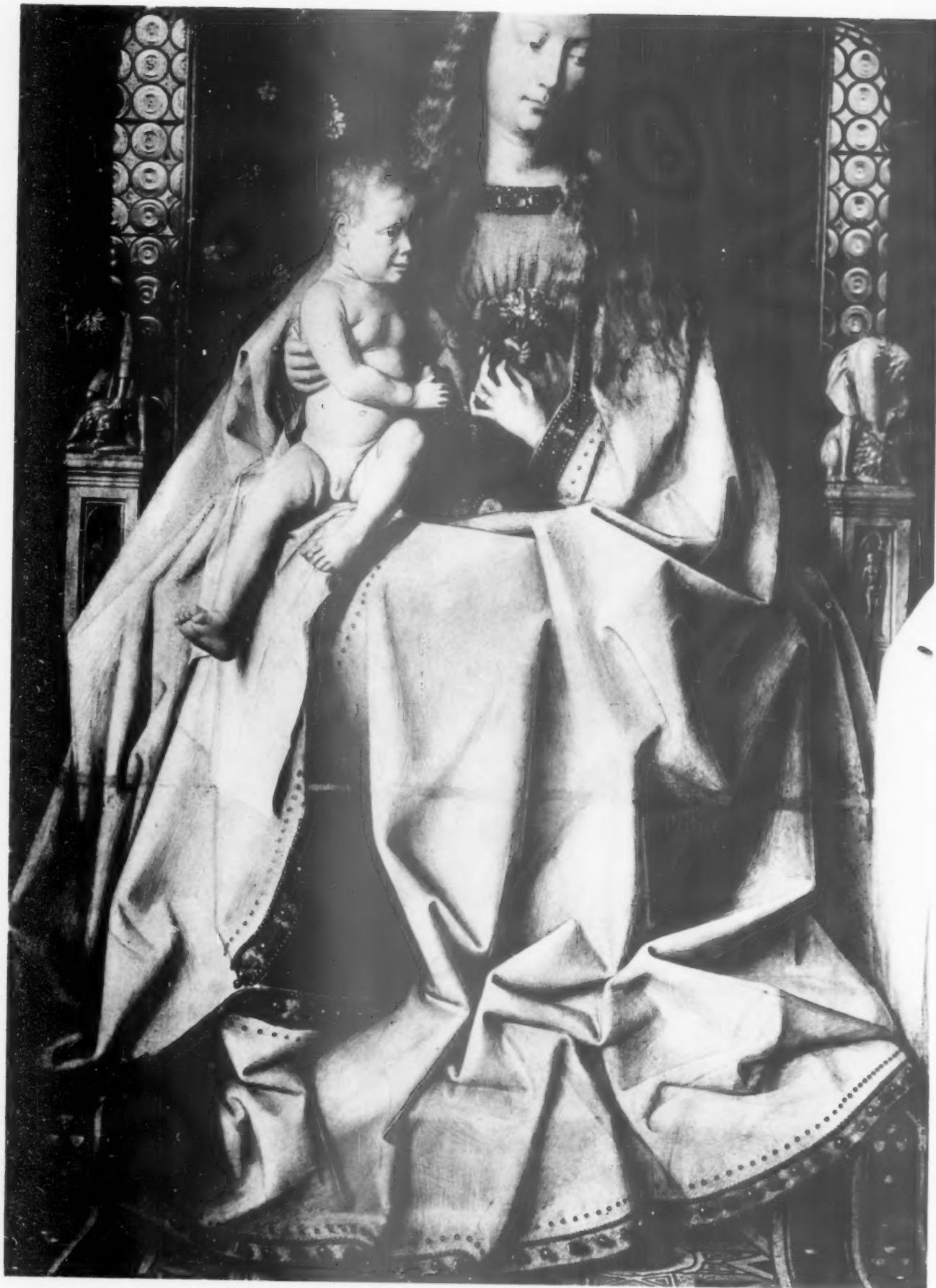


2. Infra-red photo



1. Normal photo

1-2. *Madonna of Canon Van der Paele* (detail). Bruges, Musée Communal



3. *Madonna of Canon Vander Paele* (detail). Bruges, Musée Communal. Infra-red photo



4. *Madonna of Canon Vander Paele* (detail). Bruges, Musée Communal. Normal photo



5. *Lucca Madonna*, Frankfort on the Main, Städelisches Institut  
Normal photo



6. *Lucca Madonna* (detail). Infra-red photo (reduced x 6/10)



7. *The Arnolfini Marriage* (detail). London, National Gallery  
Infra-red photo (enlarged x 2)



8. Infra-red photo (enlarged  $\times 2$ )



9. Infra-red photo



10. Infra-red photo

8-10. *The Arnolfini Marriage* (details). London, National Gallery



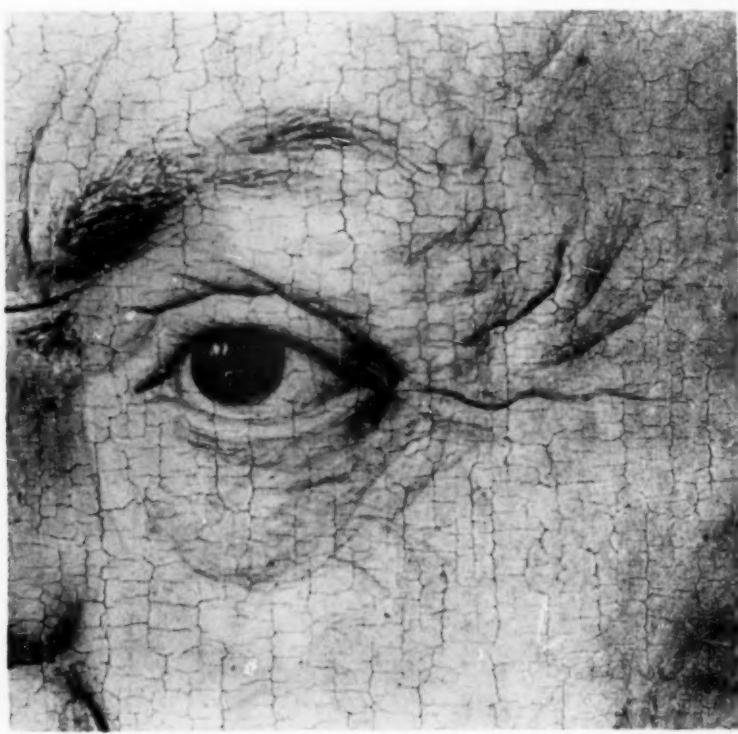
11. *Cardinal Albergati* (detail of Drawing, actual size)  
Dresden, Gemäldegalerie(?)



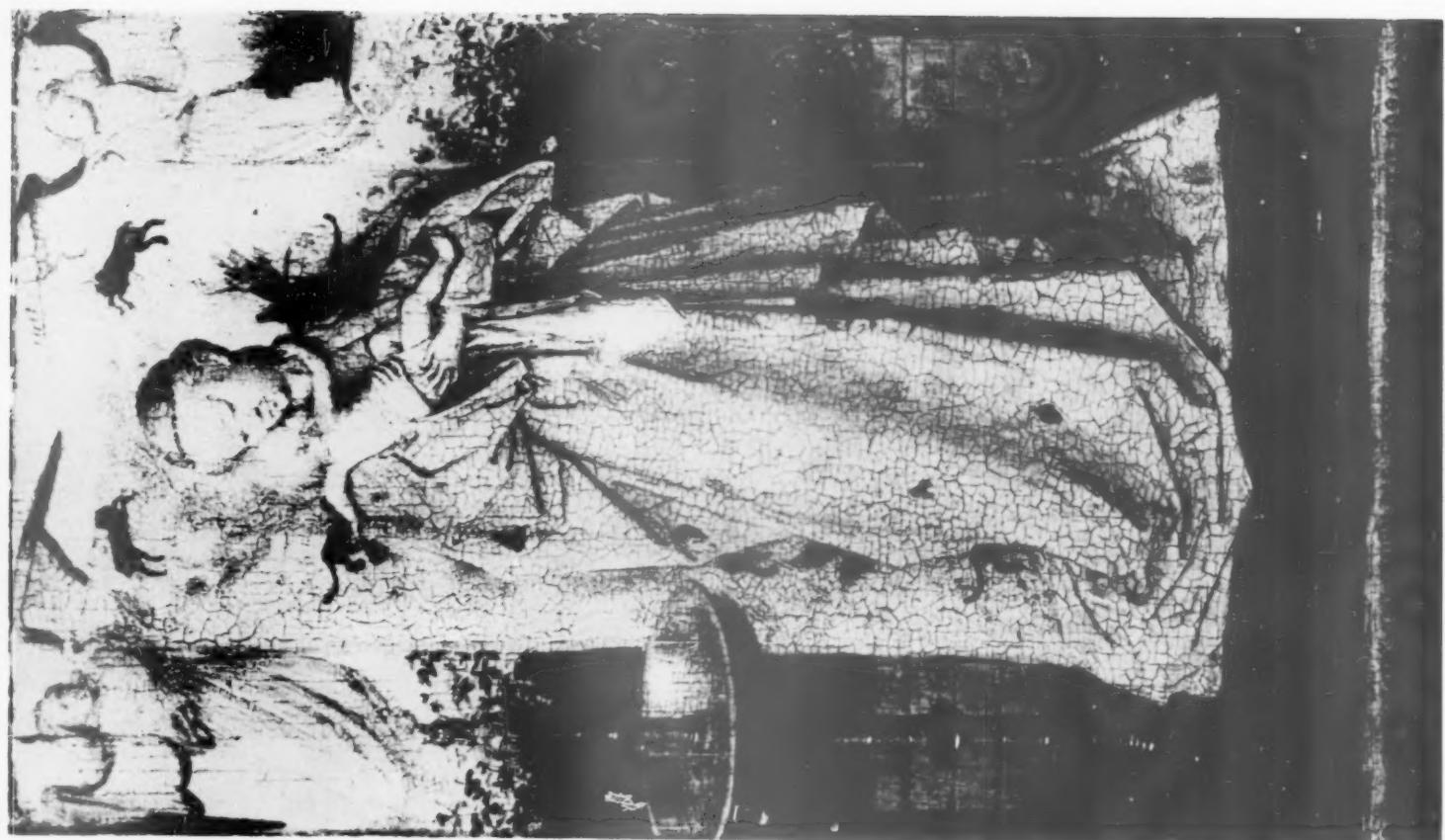
12. *Cardinal Albergati* (detail). Vienna, Kunsthistorisches Museum  
Infra-red photo



13. Detail of Fig. 11: Left eye of the Cardinal, enlarged from drawing



14. Detail: Left eye of the Cardinal, enlarged from the Vienna painting

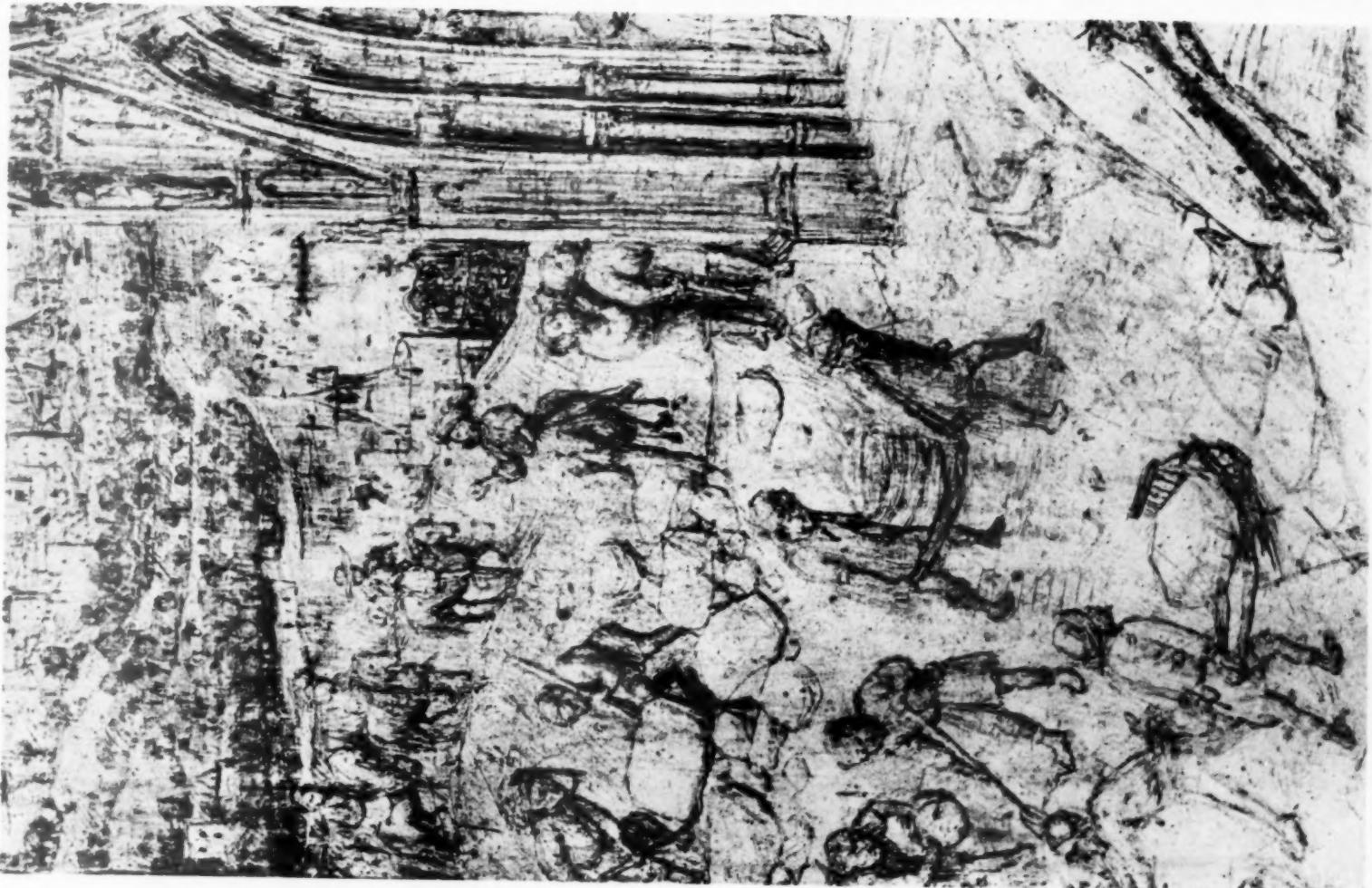
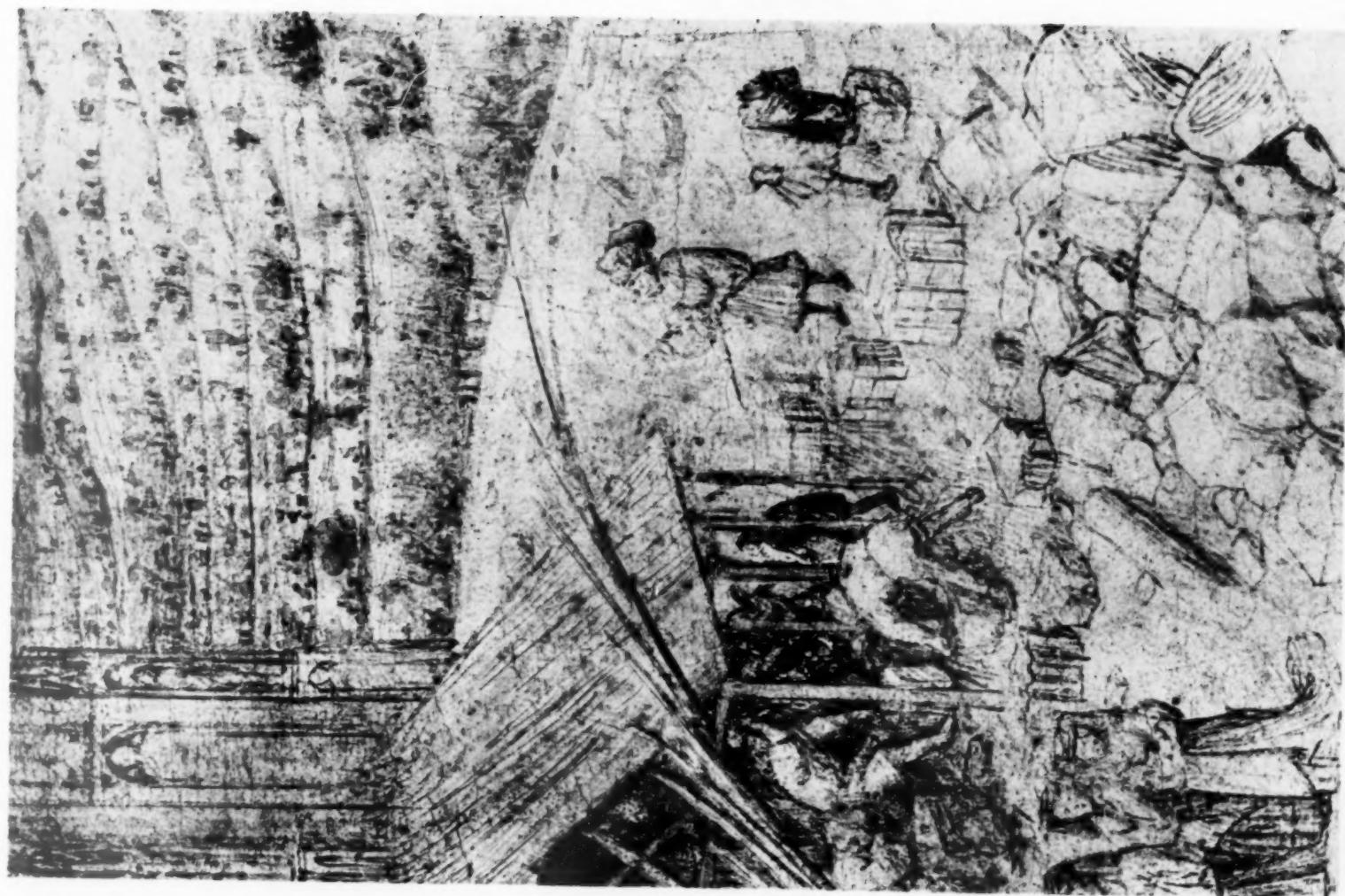


16. Infra-red photo



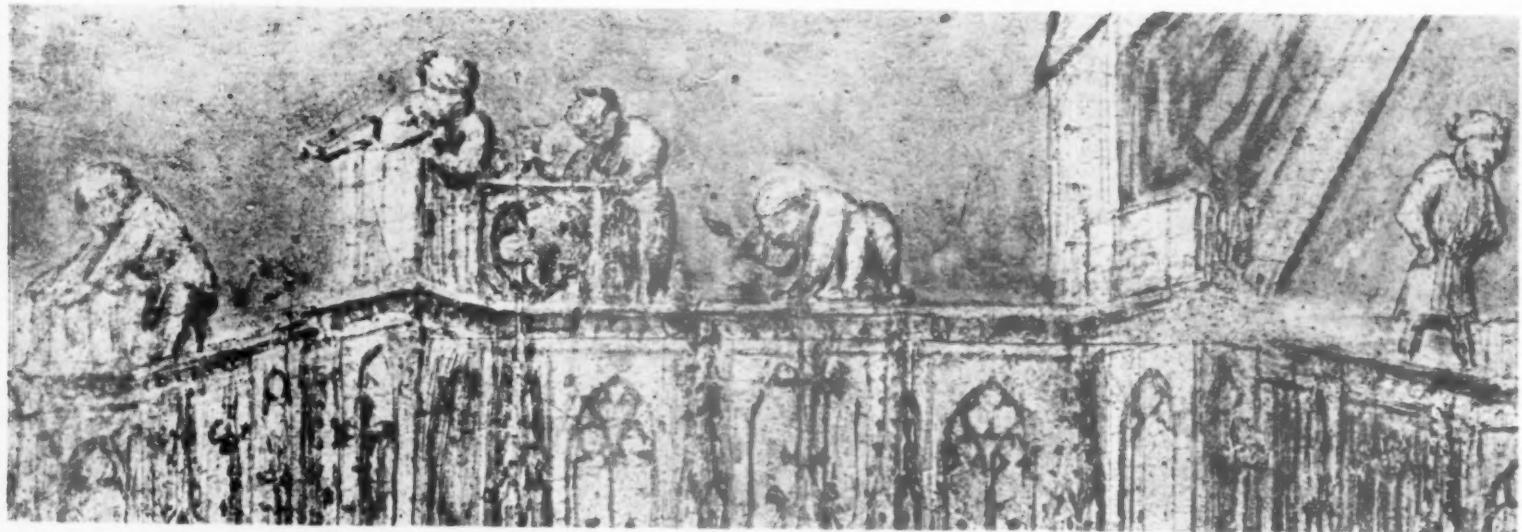
15. Normal photo

15-16. *Madonna at the Fountain*, Antwerp, Musée Royal des Beaux-Arts



17-18. *St. Barbara* (details, enlarged x 2). Antwerp, Musée des Beaux-Arts

18. Workmen and landscape at right



19. Workmen on the top of the tower (enlarged x 2)



20. Central figure (slightly enlarged)

# ANTOINE DESGODETS AND THE ACADEMIE ROYALE D'ARCHITECTURE

W. HERRMANN

WHEN, in 1671, Colbert founded the Academy of Architecture, he pursued two main objectives. One was the establishment of "la belle Architecture" as a system that could be shaped, with rules fixed and problems solved once and for all, into a suitable instrument for the policy of absolutism.<sup>1</sup> The other was to provide facilities for instructing students in the theoretical foundation of architecture. This training, together with that of the Academy in Rome, was intended to insure a supply of architects well fitted for employment within the huge building program of the Absolute State.

On the whole, the Academy fulfilled these requirements, but concentration on the theoretical side of architecture produced a further and probably unexpected result. In the seventeenth and eighteenth centuries all the great French architects belonged to the academic body and they all subscribed to the common theoretical foundation. Thus a man like Boffrand, who has been credited with the gloriously free and imaginative decoration of the Hotel Soubise, could be heard frequently debating long and seriously on a very dull point of the classical dogma. According to this dogma the imagination of the artist was free to move only within such confining limits that, like Boffrand, most architects did not always practice the theory they preached. Thus it may seem that the Academy's influence on the shaping of actual buildings was negligible. However, the work of the Academy, in debates and lectures, insured that the architects always should remain conscious of their deviations.

The influence of the Academy became apparent when early in the eighteenth century the long-fettered fancy of certain designers and decorators broke loose, producing over a span of thirty to forty years "the art of the rococo, one of the freshest artistic creations since the Gothic."<sup>2</sup> The opposition of architects, old and young, to this movement, is a most unusual event in the history of art. The movement, regarded now as a new trend started by a young generation, appeared to architects of the time as likely to disrupt the progress in which, above all, they believed.

This strange phenomenon, full of contradictions, this paper does not attempt to clarify. Its intention is only to sharpen the picture of the intellectual atmosphere that gave rise to this unique event. Much can be gathered from the minutes of the Academy's meetings, but far more can be learned if they are considered side by side with the written work of one of its most active members, Antoine Desgodets. The conscience of the French architect of the seventeenth and eighteenth centuries was vitally affected by many theoretical problems such as the question of to what extent the Roman monuments, correctly surveyed, should serve as models; the authority of Vignola and other Italian writers; the changing attitude towards the authority of Vitruvius; the fascination of intricate questions concerning the five Orders, and lastly their application to typical buildings. All these are to be found or reflected in the writings of Desgodets.

## The *Édifices* and Its Reception

Antoine Desgodets was born in Paris in 1653. When only sixteen he was employed, presumably as an apprentice, by the Département des Bâtiments du Roi.<sup>3</sup> Three years later he was regularly at-

1. Cf. Fr. A. Yates, *The French Academies of the Seventeenth Century*, London, 1947, p. 311.

2. Fiske Kimball, *The Creation of the Rococo*, Philadelphia, 1943, p. 225.

3. See below, note 71.

tending the architectural lecture course and proclaimed his intention to study architecture seriously. The privilege of admittance to the "Conférences des Architectes du Roi" was accorded to him together with three others.<sup>4</sup> In September 1674 he was sent to Rome not, it seems, as a *pensionnaire* of the French Academy but on a special mission.<sup>5</sup> After an adventurous journey he reached Rome early in 1676 and remained there until the summer of the following year.<sup>6</sup> During the short span of sixteen months he discharged the task assigned to him, which was to take exact measurements of antique buildings as they then existed.

It is almost inconceivable that within this comparatively short time one man was able to survey thoroughly the great variety of monuments, the more astonishing if one learns that he selected for publication drawings of only about half the number of buildings he had actually measured.<sup>7</sup> But no help, apart from that received from workmen for necessary excavations and scaffolding, is mentioned. His "zeal and perseverance," to which he himself refers, must indeed have been extraordinary. With singular concentration he followed the terms of the mission with which he had been charged, undeterred by any other consideration. He measured the buildings just as they stood without any attempt at restoration, incorporating as many details as possible, the whole undertaking being carried out with a degree of thoroughness and accuracy never before known. Governed by the rationalistic trend of his age, he was well equipped to create a standard work not to be superseded for a long time.<sup>8</sup>

After his return to Paris in 1677 Desgodets made every effort to keep up his early contacts with the Academy. He submitted his drawings to the Academicians for their scrutiny and presented them with a copy of the book when it was published early in 1682.<sup>9</sup> It is, therefore, usually taken for granted that "the Desgodets," the standard work on Roman antique buildings right down to the middle of the nineteenth century, was given a reception commensurate with its importance.<sup>10</sup> The

4. Archives Nationales, ms o<sup>1</sup> 1930, fol. 3. This document does not seem to have been published: "Roole de ceux qu'y ont été assidus aux leçons d'Architecture pendant cette année 1672 et qu'y ont donné leur nom comme ayant dessiné de s'appliquer sérieusement à cet art. Premièrement 1) Le Sr. Bulet, dessinateur de l'Académie d'Architecture 2) Le Sr. Le Royer 3) Le Sr. de la Boissière 4) Antoine desgodets. Ces quatre sont admis aux Conférences des Architectes du Roy pour écouter." There follow fifteen other names making a total of nineteen attending the first lecture course held in the Academy. It is interesting to see Pierre Bullet, then already thirty-three years of age, included in the list of students. That makes his authorship of the Porte St.-Martin (1674) somewhat doubtful, let alone the claim sometimes advanced that he was the real author of the Porte St.-Denis (cf. Mauclaire and C. Vigoreux, *Nicolas-François de Blondel*, Paris, 1938, p. 165).

5. *Comptes des Bâtiments du Roi sous le Règne de Louis XIV* publ. par J. Guiffrey, Paris, 1881-1901 (cited hereafter as *Comptes*), I, p. 781: Daviler, the traveling companion of Desgodets, receives money for the journey to Rome on September 19, 1674.

6. What is known of Desgodets' life is mainly based on what he himself reports in the Preface to *Les édifices antiques de Rome*, Paris, 1682, where he recounts his travel adventures, and on not always reliable information given by Abbé de Fontenay, *Dictionnaire des artistes*, Paris, 1776; by Goupy, *Les loix des bâtiments*, 1766 ed., p. x; and by David Leroy in the *Avis* to the new edition of the *Édifices* of 1779. Some independent documents have been published by A. Lance, *Dictionnaire des architectes français*, Paris, 1872; L. Vitet, *L'Académie Royale de Peinture et de Sculpture*, Paris, 1861, p. 348 and *Nouvelles archives de l'art français*, 1873, p. 116. Of modern authors only R. Blomfield, *A History of French Architecture from 1661 to 1774*, II, pp. 21-25, devotes some space to Desgodets though the biographical facts are not always correct. The best source for these are the *Procès-verbaux de*

*l'Académie Royale d'Architecture*, publ. par H. Lemonnier, Paris, 1911-1929 (cited hereafter as *Procès-verb.*) and the *Comptes*. There is also a short article in Thieme-Becker.

7. H. Lemonnier, "Les dessins originaux de Desgodet pour 'Les édifices antiques de Rome,'" *Revue archéologique*, v<sup>e</sup> Ser., VI, 1917, p. 216.

8. Almost a century after its publication it was still considered to be "more complete and more accurate than any offered . . . since," and Desgodets himself is called "preserver of antiquities" (Preface by G. Marshall to the English edition of the *Édifices*, *The Ancient Buildings of Rome*, London, 1771). For Caylus the *Édifices* is "un ouvrage immortel" (*Correspondance inédite du Comte de Caylus avec le P. Paciaudi*, ed. Nisard, 1877, II, p. 85) and his method is praised by Abbé Barthélemy as "sage et exacte" (*Voyage en Italie*, ed. Sériey, Paris, 1802, p. 210). Stuart and Revett, in order to justify their criticism of Leroy, refer to the "excellent Desgodets" as a "sufficient authority" (*The Antiquities of Athens*, London, 1762, I, p. 5). Only occasionally is his exactitude depreciated (cf. D. Leroy, *Observations sur les édifices des anciens*, Paris, 1767, p. 8, and A. Delamair, *La pure Vérité*, 1737, Bibl. de l'Arsenal ms 3054, pp. 139-141, who calls his exactitude "aussi minutieuse que stérile"). Yet, in the next century William Smith, *Dictionary of Greek and Roman Geography*, London, 1857, II, p. 855, still considered the work to be indispensable "for students of Roman architecture." For a professional judgment of more recent times see Blomfield, *op.cit.*, p. 23: "I doubt if there has ever been a finer collection of measured drawings." On the other hand, Lemonnier, *op.cit.*, p. 229, thinks him "inexperienced and uncertain of his method."

9. *Procès-verb.*, December 13, 1677 (I, p. 155) and March 23, 1682 (II, p. 6).

10. For instance Lemonnier in the Introduction to *Procès-verb.*, IV, p. xii: "Monuments antiques . . . dont l'Académie avait fait si souvent usage dans ses discussions depuis leur publication en 1682."

author enjoyed the active patronage of Colbert as evidenced by the official assistance granted for the publication of his work and an honorarium of 2000 l. paid to him on that occasion.<sup>11</sup> But there does not seem to have been an equal response from less official quarters, at least not so far as we can judge from the reaction of the Academy, a body which reflected professional opinion of the period quite well.

Towards the end of 1677 the Academy examined Desgodets' book of drawings and found it at a first glance "un fort grand et fort beau travail." At subsequent meetings the members scrutinized some of the drawings in greater detail and, when they discovered that the measurements disagreed with those of other authors, especially Palladio, they wanted, reasonably enough, to have both sets of designs reduced to a common measure in order to secure a fair comparison. These comparative drawings do not seem ever to have been made and the examination was discontinued.<sup>12</sup> It can be argued that Desgodets' sketchbook contained preliminary drawings only, but even after the work had been published in 1682, it was not examined for twelve years.<sup>13</sup> Reading the minutes of the meetings during these years, one cannot help feeling that the silence is deliberate. When, in the year following the publication of the book, the Academy re-examined the old minutes, all the meetings during which Desgodets' drawings were being examined were ignored and no mention was made of the fact that in the meantime the work, with full text, had been published.<sup>14</sup> In these twelve years there would have been many opportunities to refer to the book. Each time members came across contradictions in the works of the authoritative writers on ancient Rome the obvious action would have been to consult the most recent work on the subject, the one that was easily accessible in their library.<sup>15</sup> It was never done. In 1687 they wanted to seek information on a doubtful point from "the other authors who had written on this building" but Desgodets was not mentioned.<sup>16</sup> Again, in the beginning of the following year, they request the Academy in Rome to measure "des bastimens antiques de Rome" as if this had never been done in living memory.<sup>17</sup> They are often puzzled as to the exact form or position of a detail, but still do not refer to the author whom a few years later they were to accept as an authority. Then suddenly, in 1693, their attitude changed. The circumstances were just the same as they had been at similar meetings over the last decade, but now, for the first time they did what one would have expected them to do ever since Desgodets presented them with a copy of his work—they consulted his designs and measurements.<sup>18</sup>

This behavior is so extraordinary that it calls for an explanation. Desgodets himself gave three reasons why the possibility of an unfavorable reception of his book might be anticipated: the natural dislike that people feel for a reformer, his own youth, and the extreme precision that was his guiding principle. This last could, he thought, be resented as being useless and unnecessarily ostentatious.<sup>19</sup> It is quite possible that all three factors contributed to the cool reception of his work by the Academy. He was an inexperienced architect when he set off for Rome at the age of twenty, and he was only twenty-four when he presented his drawings to the Academy. The published book listed unremittingly, on page after page and down to the smallest detail, the mistakes which the great authorities on Roman architecture, Palladio, Labacco, Serlio and Fréart de Cham-

11. *Comptes*, II, p. 245.

12. *Procès-verb.*, December 13, 1677 to March 7, 1678 (I, pp. 155-161).

13. Upon receipt of a copy of the book members remark, however, that Desgodets had measured "fort exactement et avec grand soin" (*Procès-verb.*, March 23, 1682). Blomfield (*op.cit.*, p. 22) noticed this time lapse, yet did not attempt an explanation: "... the Academy . . . paid no further attention to [the book] for the next twelve years, and Desgodet's early relations to the Academy are obscure."

14. *Procès-verb.*, June 21 and July 5, 1683 (II, pp. 32f.).

They only confirm their very critical remarks on the low standard of the Temple de la Concorde which Desgodets had included in his book.

15. *Procès-verb.*, April 5 and May 17, 1683 (II, pp. 25, 29); June 20 and December 19, 1687 (II, pp. 145, 153); January 9, 1688 (II, p. 155); April 13, 1688 (II, p. 158); December 3, 1691 (II, p. 225).

16. *Ibid.*, II, p. 146.

17. *Ibid.*, II, p. 155.

18. *Ibid.*, November 4, 1693 (II, p. 269).

19. *Édifices*, Préface.

bray, had made. Of course, the Academy itself was aware from the beginning of the frequent inaccuracies contained in the writing of these authors; in fact they had examined in detail Palladio's measurements of ancient monuments shortly before Desgodets left for Rome, and even had had a doubtful point verified in Rome.<sup>20</sup> But for a member of the Academy it must have been a very different matter whether he, from his great experience and after many deliberations, detected Palladio's inconsistencies or whether a young man with a measuring rod showed up the blunders of the masters. In addition, the Director of the Academy in Rome had remarked that "rain, dust and wind grind marble down and change the original proportions" so that "many of these petty observations down to one-twelfth or one-tenth are quite unnecessary."<sup>21</sup> It makes admittedly tedious reading to which, fortunately, as the *Journal des savants* remarks, "the author in order to refresh the reader has added the history of the buildings."<sup>22</sup> Desgodets' teacher, Blondel, concedes scornfully that "scrupulous research . . . may sometimes establish a difference of some inches" but insists that this would not alter the effect of the proportions as a whole.<sup>23</sup>

This last remark discloses a possible further motive for the neglect with which the Academy treated Desgodets' book. As it happened not only Palladio or Serlio were proved to have been not too accurate but also, and really to a far more embarrassing degree, the Director of the Academy of Architecture, François Blondel. A careful study of the *Édifices* would have exposed his frequent errors. It would have become obvious that the measurements of ancient buildings, presented by him to students since 1672 and published only one year after Desgodets' work, were not out by inches, as he himself thought quite possible, but sometimes, figuratively speaking, by miles. It would, for instance, have demonstrated his credulity in accepting Serlio's schematic woodcuts as true representations of ancient monuments and often also his carelessness when, for instance, he refers to superimposed orders on the outside and inside of the Pantheon although Palladio's illustration alone shows these orders and only an inattentive glance at Serlio's picture of the interior could have mistaken the attic for a full-sized superimposed order.<sup>24</sup> It is again due to carelessness rather than ignorance that he refers to the Doric pedestals on the Theater of Marcellus, a carelessness which, if discovered, would have caused some embarrassment as this building was considered the foremost example for a Doric order without base, let alone a pedestal.<sup>25</sup> Perhaps even worse is Blondel's carelessness on another occasion. In the second part of his *Cours* he published

20. *Procès-verbal*, August 5, 1675 (I, p. 105).

21. Letter of June 26, 1696, by La Teulière to Villacerf (see *Correspondance des Directeurs de l'Académie de France à Rome*, publ. par A. de Montaiglon, Paris, 1888, II, p. 239).

22. *Journal des savants*, May 25, 1682.

23. François Blondel, *Cours d'Architecture*, Paris, 1683, IV, p. 581: "Surquoy il ne faut pas s'étonner que dans la recherche scrupuleuse que l'on peut faire de ses parties, il se rencontre par fois de la différence de quelques pouces; car ces petites inégalitez ne doivent point nuire aux proportions du tout et de ses parties principales . . .".

24. *Ibid.*, III, p. 263. Other examples of instances in which Blondel accepted Serlio's drawings as correct and thus exposed himself to criticism are the Theater of Marcellus (IV, p. 388), the Temple of Bacchus (III, p. 263), the Temple of Vesta in Tivoli (IV, p. 558). For the Arch of Titus he also followed Serlio but corrected his drawings in some respects (cf. IV, p. 580 and *Architettura di S. Serlio bolognese*, Venice, 1663, III, pp. 91, 127, 101, 108, 177). For the Basilica of Constantine ("Temple de la Paix," III, p. 243) and the temples of Antonius and Faustina (V, p. 745) and of Mars Ultor (V, p. 744), he accepts Palladio's free reconstructions. Ironically enough, Blondel himself warns "qu'il est bien dangereux de raisonner . . . sur les desseins des ouvrages que l'on n'a point vu . . .". He specifically mentions the mistakes made by Serlio and Palladio through their not having seen the buildings for themselves, but as he singles out only Chambord and Nîmes

his remark apparently does not extend to the Roman buildings. Fréart too, in his opinion, would have avoided a mistake regarding a certain capital if he had taken the trouble "de l'examiner lui même sur le lieu et d'en faire prendre les mesures exactes comme j'ai fait." (II, p. 39. Parts I and II of the *Cours* had already been published in 1675.) Blondel had been in Rome in 1655 and for a short time in 1671 (Mauclaire, *Blondel*, pp. 63, 132) and had prided himself before the Academy with his firsthand knowledge and exact measurements (*Procès-verbal*, February 25, and March 12, 1674: I, pp. 63, 65).

25. *Ibid.*, II, p. 51. Blondel expressly refers to the pedestal though Lemonnier, misled by an erroneous reference in the minutes to Palladio instead of to Vignola, disputes it (*Procès-verbal*, II, p. 340). In fact, Blondel had already mentioned the pedestal a few pages earlier (p. 46). Of course, it may have been a careless slip: perhaps he meant the second Ionic Order. However, Blondel's engraving (IV, p. 388) shows no pedestals on either Order whereas the actual building has a pedestal under the Ionic Order of about one-sixth the height of the column. The Academy noted all these mistakes when reading Blondel's *Cours* in 1697 and 1698 and found the proportions of the Arch of Titus, of the portal of the Pantheon, and of the Theater of Marcellus to be wrong (*Procès-verbal*, III, pp. 36, 33, 25, 15). There are many more inaccuracies in Blondel's work which it would be tedious to quote in detail.

three engravings which are obviously taken from Desgodets' book (cf., for example, Figs. 1, 2). By doing so he made it clear that he knew the book, and yet he made no use of anything else it contained. He could hardly claim that the time since its publication was too short for incorporating the new information and for making corrections where necessary. Perrault, publishing his *Ordonnance* in the same year as Blondel's *Cours*, was able to make use of Desgodets' measurements. What Blondel did was truly extraordinary. He published these engravings, which agree in every detail and in all the proportions with those shown by Desgodets, but often not in the least with the measurements given in his own text and repeated on the engravings. Anyone comparing the two books would have drawn the conclusion that Blondel either did not look at these illustrations or did not notice the discrepancies between their proportions and those mentioned in his own text.<sup>26</sup> It is understandable that the Director of the Academy was not too eager to have this book thoroughly examined.

But this aversion has deeper roots than the purely personal difference between a man of extremely wide knowledge yet a singular unconcern for checking details and a person of a more pedestrian nature who replaced lack of imagination by accuracy. Desgodets presents his material in the most objective way: a few historical remarks lead to a short description of the building or its part, which again is followed by a detailed list of all the mistakes made by those who had published the material before. He is very conscientious in giving the facts, hardly ever resorts to conjecture, and always states clearly when, in exceptional cases, he relies on evidence other than personal inspection. The text often sounds surprisingly modern, resembling an archaeological excavation report in its enumeration of detail and conscious abstention from evaluation. But, of course, it would be misleading to assume that Desgodets was the forerunner of modern archaeological science. He regarded accuracy as of the highest importance—"it is the only thing that matters here"<sup>27</sup>—but not for its own sake. He had become conscious of the many mistakes committed by various authors when describing ancient monuments. Perhaps, he reasoned, they did not believe in the importance of precise measurements and may have been convinced that beauty is not dependent on minute differences in proportions. But he came to reject that possibility, seeing that all authors marked the proportions, down to the smallest detail. Yet in that case, he asked, why did they do it? For him there is only one possible explanation, that they knew of the mysterious nature of proportions although even they were not initiated into the ultimate mysteries. But just as one does not know the cause and purpose of the movement of the stars in heaven or, on earth, the obscure workings of the animal organism and yet is convinced that they all serve some useful purpose, so in the same way the great masters knew of the ultimate meaning of proportions even if some of them were beyond their comprehension. He does not doubt the mysterious nature of the proportions as enshrined in the monuments bequeathed to us by the ancients. That is the reason, in Desgodets' opinion, why these buildings cannot be too closely imitated. It is also the reason why he went to an extreme degree of precision in measuring them: he wants to enable others to penetrate more deeply into their mysteries. With this aim in mind, he describes every little detail. He may not know its ultimate meaning, but as in the sphere of God's creation "one can be sure that nothing exists in these perfect beings which does not serve some purpose."<sup>28</sup>

26. The three illustrations, different in style and technique from most others in the book, refer to the Temple of Castor and Pollux (II, p. 114; *Édifices*, p. 129), the Frontispiece of Nero (II, p. 119; *Édifices*, p. 149) and the Arch of Titus (II, p. 127; *Édifices*, p. 185). Blondel did not use Desgodets' final plates. Most of the ornamental details were not yet drawn in when Blondel obtained by some means the plates or drawings.

27. *Édifices*, Préface: "... cet exactitude est la seule chose dont il s'agit ici." Stuart and Revett paraphrase this opinion: "Accuracy is the principal and almost the only Merit [books

of this sort] can have." (*The Antiquities of Athens*, London, 1762, I, p. 5.)

28. *Ibid.*: "Et cette exactitude de ces grands Maîtres à cotter toutes les mesures, semble faire entendre, qu'il y a des mystères dans les proportions de l'Architecture, qu'il n'est donné qu'aux Scavans de pénétrer; et que de même que dans le cours des Astres, et dans les Organes qui servent aux plus nobles fonctions des Animaux, il y a des mouvements et des conformations dont on ignore les causes et les usages; quoique l'on soit assuré qu'il n'y a rien dans ces Estres si parfaits qui ne serve à quelque

Blondel is convinced, just as Desgodets, of the *a priori* character of proportions. But Blondel, following Alberti and Palladio, believed also in the Platonic conception of numerical harmony,<sup>29</sup> and that in architecture as in music there exist harmonic ratios that he attempts to elicit from Palladio's buildings and also from ancient monuments. Here he finds the musical proportions he is looking for, not being aware that in many cases an ancient monument as given by Palladio or Serlio is almost as much a creation of these artists as their own buildings. In any case, he is convinced that he will find in the monuments of the ancients ". . . traces of that wonderful unity that one encounters everywhere in Nature."<sup>30</sup> Blondel's ultimate aim is to elicit from nature and from the ruinous remains of ancient architecture the principles governing this unity. When he examines antique buildings he admits freely that he is concerned only with the major measurements, leaving it to others to attend to details of moldings and ornaments.<sup>31</sup> Blondel being thus in search of harmonic ratios has no use for Desgodets' scrupulous exactitude. Not that he looked down upon awkward figures as such. His treatise is full of calculations and additions which, carried out meticulously, arrive at very awkward figures. But for him they are often only the result of expressing a measurement in modules, or two separate parts in the form of a ratio, or of applying the arithmetical or geometrical mean.<sup>32</sup>

Yet that he strongly believed in the existence, behind these seemingly awkward figures, of a relationship as wonderful as that of nature, becomes evident towards the end of the treatise when he treats once more of the great Roman buildings such as the Temples of Mars Ultor, Antoninus and Faustina, Fortuna Virilis, Vesta, and the Pantheon.<sup>33</sup> These descriptions are free from incommensurate fractions. One feels that he is approaching his goal, particularly when he recounts how nothing had given him so much pleasure as finding that all parts of the Pantheon are "joined together with such wonderful skill and by proportions of such great regularity."<sup>34</sup> To have these buildings now, as it were, taken to pieces again after he had just demonstrated their fusion into an harmonious whole meant for him only a regression and the negation of all his efforts. Although his own book is full of figures denoting "imperceptible parts of a module," he can say in all sincerity that it often surprised him "to see that so many persons interested in architecture took great pains to check with overscrupulous accuracy the measurements of antique buildings down to recording imperceptible parts of a module and that no one undertook to study thoroughly the means by which the ancient architects gave beauty to their buildings."<sup>35</sup> Desgodets' painstakingly exact

chose; il se peut faire aussi que les Savans en Architecture, . . . sont les seuls qui sachent le fin de ces proportions; et que s'il y en a quelqu'unes dont les raisons échappent à leur connaissance, il faut juger par celles qu'ils ont découvertes, de celles qui ne sont pas encore trouvées, et estre assuré du moins que ces grands exemples que les anciens nous ont laissé, ne sauroient estre assez exactement imitéz."

29. Cf. R. Wittkower, *Architectural Principles in the Age of Humanism*, London, 1952, p. 126.

30. Blondel, *Cours*, v, p. 758: ". . . après les avoir examinés fort scrupuleusement . . . les traces admirables de cette unité qui se rencontre dans toutes les manières d'agir de la nature. . . ."

31. *Ibid.*, iv, p. 578.

32. An example, typical of countless others, is to be found in his calculations of the Vitruvian Corinthian Order (1, p. 134). With complete unconcern for the awkward figures resulting from the ratios, he fixes the base of the pedestal at one-fifth and its cornice at one-eighth the height of the Dé which brings the total height of the pedestal to  $7 \frac{23}{80}$  mod. and the total height of the Order to  $33 \frac{43}{80}$  mod. Desgodets, later in his *Traité*, is careful to give the Dé a height which allows the total height of the pedestal and of the Order to come to comparatively simple figures ( $16 \frac{2}{3}$  and  $30 \frac{2}{3}$  respectively). In fact, to achieve this he makes the height of the pedestal's cornice one minute lower than it should have been to accord

with the proportion of the members of the pedestal as stated in the text. Blondel's correction of Scamozzi's figures offers a good example of a case in which the application of the arithmetical mean leads to the awkward figure of  $4 \frac{17}{28}$  as the height of the entablature in relation to the column (1, p. 64). Elsewhere he expresses the ratio between two superimposed Orders as "44385 à 37562 ou près 6 à 5" (III, p. 285).

33. *Ibid.*, v, 5, Chs. 8 and 9.

34. *Ibid.*, v, p. 748: "Mais à dire vray, il n'y a rien de si surprenant ny qui m'ait donné tant de plaisir, que lorsque méditant sur la structure entière du Temple de la Rotonde, j'ay trouvé que toutes ses parties sont jointes ensemble avec un artifice si merveilleux et sous des proportions tellement uniformes qu'un petit nombre de lignes tirées à propos, déterminent par leur rencontre toutes les grandeurs qui entrent en la composition de cet Ouvrage. . . ."

35. *Loc.cit.*: ". . . je me suis souvent étonné que tant de personnes curieuses en Architecture ayant pris soin de rechercher avec une exactitude superstitionnée les mesures des bâtiments antiques jusqu'à nous en marquer des minutes imperceptibles. Et que personne ne se soit avisé d'étudier à fond l'artifice dont les Architectes anciens se sont servis pour donner à leurs Édifices la beauté . . . n'y ayant point d'apparence qu'ils aient . . . toujours travaillé au hazard et en tâtonnant."

measurements must have appeared to him only as so many stumbling blocks on his road to the "grande justesse de symmetrie."<sup>36</sup>

In the later part of his *Cours* he refers to these measurements, which seem to him pedantic.<sup>37</sup> There can be little doubt that it was primarily Desgodets' book that he had in mind when he speaks of the impossibility of ever reaching that precision in the execution of large buildings which demands measuring "en pieds, en pouces, en lignes et en demi-lignes"; and when he ridicules the man with the measuring rod who could hardly secure identical results if he measured the building again;<sup>38</sup> or when he rejects the idea that the symmetry of the Arch of Constantine could be upset by one arch being one or two inches wider than the other. This difference was detected by Desgodets and remarked on in his text.<sup>39</sup>

But although Blondel considers the passion for this kind of accuracy to be nothing but "superstitieuse" he realizes quite well that its results could be used in argument against his theory of harmonic numbers. Admitting that these latest measurements do not agree with the proportions as given by him and that one "owes much to those who have given us the measurements of antique buildings with the utmost accuracy," he is nevertheless convinced that it would be wrong to deduce from these figures that his own theory has no real foundation and that he imputes to the ancient architects a sense of proportions of which there is no trace in their actual works.<sup>40</sup> First, odd proportions do not prove the architect's intention, as it is impossible to avoid faults in the execution of a design. Second—and here he comes nearer to the vital point of the argument—it is not the actual but the apparent proportion which matters. A building or its parts may be well proportioned in themselves, yet they will still not achieve an agreeable effect unless they also appear to the eye as being well proportioned.<sup>41</sup> In other words, in many cases the architect has to adjust the harmonic numbers to counteract the influence of optical laws. He will forego the reality of measurable, harmonic numbers in the actual building in order to produce their optical effect.

Undoubtedly there is some logic in this answer; yet it does not explain completely the discrepancies between the numerical harmony and the actual measurements as revealed by Desgodets' work. Apart from the careless blunders cited above there still remained a number of cases in which Desgodets' figures varied sufficiently to prove that this harmony may not be the ultimate reason for the beauty of a building.

There would have been cases, for instance, as on the outside of the Pantheon, where Desgodets' measurements for the different stories agree neither with the correct harmonic nor with the "optically" adjusted numbers as given by Blondel.<sup>42</sup> On the other hand, there is the case of the

36. *Ibid.*, p. 755: "Il est mal aisé de croire que ces grands Hommes . . . soient arrivé à une si grande justesse de symmetrie . . . sans qu'ils en aient en auparavant la connaissance et l'idée dans leurs esprit."

37. Desgodets' accuracy could certainly be tiresome. The following must serve as one of many examples. *Édifices*, pl. ix, Pantheon, base of column: the projection of the two astragals differs according to Desgodets by  $1/24$  minute (35 5/6 and 35 7/8). The diameter of the column being 4' 6", the difference amounts to one millimeter!

38. *Cours*, v, p. 781.

39. *Ibid.*, IV, p. 592 and *Édifices*, p. 225.

40. *Cours*, v, pp. 779ff.: "Il me semble que j'entends quelqu'un qui me reproche que . . . j'impute à la plupart des Architectes anciens et modernes des sentimens qu'ils n'ont jamais . . . pensé et qui n'y sont point en effet. Ce que l'on peut, dira-t-on, facilement reconnoître, au moins dans les dessins des Bâtiments antiques, dont nous avons à présent des descriptions de la dernière justesse, et dont les véritables mesures sont assez éloignées de ces proportions que je leur donne."

"Sur quoy je dis que bien que je fasse beaucoup de cas de l'exactitude dans les mesures, et que je sois persuadé que l'on a beaucoup d'obligation à ceux qui nous ont donné celles des

Bâtiments antiques dans la dernière justesse; il ne faut pourtant pas croire . . . que ce soit toujours l'Architecte qui ait fait la première faute dans son dessin."

41. *Ibid.*, v, p. 781: "... les parties d'un bâtiment ont beau estre proportionnées en elles-mêmes; elles ne seront jamais agréables si elles ne nous paroissent pas proportionnées."

42. *Ibid.*, v, p. 782. According to rule the stories should be in a continuous proportion of 4:3 which Blondel, not quite exactly, calculates in feet: 41':30'5":24'6". He believes that the architect adjusted the height of the stories in order to make them appear to have the proportion of 4:3. Blondel gives the adjusted, actual measurements as 41': slightly more than 31': almost 26'. Desgodets' dimensions are 41' 1":32' 2 3/4":30 1/4". Furthermore, Blondel expresses many interrelated parts in ratios of 1:1, 4:3, 7:4 and 5:4, most of which are incorrect according to Desgodets' measurements. In many cases these new, exact measurements have even an effect opposite to the one that Blondel's optically adjusted proportions would produce.

In this context it should be noted that Blondel imagined even his own works to have proportions "qui n'y sont point en effet." The younger Blondel measured the Porte St.-Denis in 1768 and found that "les mesures prises sur le monument

Theater of Marcellus. According to the doctrine the first of superimposed orders should be taller than the one above it. Blondel, following Serlio, finds that this is reversed on this building and, therefore, cites the proportions of its superimposed orders as an example of an adjustment made by the architect for optical reasons "because all he wanted was to make the higher order appear somewhat less high than the one which is nearest to the eye."<sup>43</sup> Now Desgodets' measurements would have shown the fallacy of that reasoning because the upper order follows in fact the doctrine and is actually less high than the one below. In addition, the optical illusion (if one follows Blondel's argument) would have reduced the apparent height of the upper order still further. Undoubtedly, Blondel would have found it difficult to maintain his theory in the presence of these exact measurements and it is thus understandable that he put Desgodets' book aside and prevented the Academy from examining it.

Whereas Blondel can have had no basic objection to Desgodets' belief in the mysterious nature of proportions, it was exactly this conception which Blondel's opponent, Claude Perrault, attacked. His aim, as outlined in the Preface to the *Ordonnance*, was to remove the obstacles which barred his attempt to establish simple and everlasting architectural rules. He assails the architects of modern times for their unreasonable adoration of the Antique "everything of which they admire but principally the mystery of proportions. . . . This excessive respect for the Antique stems, totally unreasonable as it is, from the genuine respect due to holy things."<sup>44</sup> So far, he argues, not criticism but authority governs architecture to such an extent that the ancient architects are supposed to be always right even if their reasons are unknown to us.<sup>45</sup> Perhaps, he reasons in a different context, these mysteries are impenetrable only because we value too highly the miracles which they are supposed to harbor and thus look for something which is not there.<sup>46</sup>

The dispute between Perrault and Blondel made its first appearance in print when Blondel published his *Cours* in 1676, but it became a heated argument only with the publication of the second volume in 1683 and Perrault's reply in the second edition of his *Vitruvius*. Nevertheless, the peculiar views of Perrault were known with the first edition of the *Vitruvius* and any opposition to them must have been voiced after that.<sup>47</sup> Much therefore of what Perrault said in the Preface to the *Ordonnance* was already directed against Blondel, but it seems doubtful if the words just quoted referred to him. Blondel believed in the eternal and unalterable harmony of numbers, but he never refers to the mysterious nature of them nor does he accept ancient architecture as a model to be followed uncritically and unreservedly. He does not belong to those "who refuse to approve forms for which examples cannot be found amongst ancient buildings."<sup>48</sup> It was Desgodets who

dans son état actuel ne sont pas, à des différences assez considérables près telles que M. Blondel les donne, et par conséquent que les conséquences qu'il en tire ne sont pas exactes." (*Procès-verb.*, VIII, p. 19. Cf. Fr. Blondel, *Cours*, IV, p. 623. A. E. Brinckmann [Baukunst des 17. u. 18. Jh in den romanischen Landern, p. 230] still accepts Blondel's drawings as correct.) This case is of interest for the question of how far proportions of the drawing board agree with those of the actual building, providing, of course, one draws the conclusion that Blondel was the real author of the Porte St.-Denis.

43. *Ibid.*, III, p. 254; and V, p. 725.

44. Claude Perrault, *Ordonnance des cinq espèces de colonnes*, Paris, 1683, pp. xviif.: ". . . il n'est pas convenable jusqu'ou va la révérence et la religion que les Architectes ont pour ces ouvrages que l'on appelle l'Antique dans lesquels ils admirent tout, mais principalement les mystères des proportions qu'ils se contentent de contempler avec un profond respect, sans oser entreprendre de pénétrer les raisons pourquoy les dimensions d'une moulure n'ont pas été un peu plus petites, ou un peu plus grandes . . . ce respect excessif des Architectes pour l'Antique . . . prend sa source . . . du véritable respect qui est deû aux choses saintes." The whole tenor of this passage with its distinction between the two spheres of knowledge is

closely related to thoughts expressed by Pascal (see "Préface sur le *Traité du Vide*," *Oeuvres de Blaise Pascal*, ed. L. Brunschwig and P. Bourroux, Paris, 1908, II, pp. 129ff. and "Les Provinciales" [xviii<sup>e</sup> Lettre], *Oeuvres de Blaise Pascal*, ed. P. Faugère, Paris, 1895, II, pp. 230ff.).

45. *Ibid.*, p. xix: "L'Architecture . . . est aussi gouvernée par cet esprit ['respect deû aux choses saintes'] plus que les autres Arts; on y a voulu argumenter par autorité, supposant que les Auteurs des admirables ouvrages de l'antiquité n'ont rien fait qui n'ait des raisons quoique nous ne les connaissons pas."

46. *Les dix livres d'Architecture de Vitruve*, 2nd ed., Paris, 1684, p. 163, Explication de la planche xli. (He refers to the mysteries of the music of the Ancients): "Quelques-uns croient que ce qui nous rend ces mystères impénétrables, n'est que la trop grande opinion que nous avons des merveilles que l'on dit qu'ils renferment, parce que cette opinion fait que nous y cherchons ce qui peut-être n'y est point."

47. *Procès-verb.*, August 18, 1681 (I, p. 321). The first edition of Perrault's *Vitruvius* dates from 1673.

48. Blondel, *Cours*, III, p. 250. Also II, p. 169: ". . . on doit avoir toute l'estime possible et même de la vénération pour l'antique . . . mais . . . cette vénération ne doit point être

had spoken of the mysteries of proportions and of the necessity to imitate ancient monuments even if they are not wholly understood. Perrault's sarcastic remarks about architects who confuse architecture with religion may well have been directed against Desgodets. If Perrault thus objected to the general sentiment underlying Desgodets' book, he received its results with great satisfaction—exactly the opposite of the position taken by Blondel, who could agree with the author's general outlook but must have been irritated by the results. Perrault's principal claim, the right to make changes in the traditional proportions, was considerably strengthened by its having been confirmed once more, and with the utmost accuracy, that "neither two ancient buildings nor two authors agree with each other nor follow the same rules."<sup>50</sup> Perrault definitely made use of the *Édifices*, taking most measurements of Roman buildings for his comparative tables from it.<sup>51</sup>

Soon after Blondel's death in 1686, members revert to their initial practice of reading at their meetings the works of the great theoretical writers. Again and again occasions arise where a reference to Desgodets' book would have removed easily any ambiguity caused by conflicting statements. They listen to a memorandum by De la Hire on this subject and in consequence ask Rome to take measurements.<sup>52</sup> A reading of Perrault's *Ordonnance* induces them to establish the measurements of the Orders and they make their decision between the capitals of the Pantheon and those of the Temple of Castor and Pollux by examining the plaster model of the Pantheon, not the engravings of both capitals by Desgodets.<sup>53</sup> As late as December 1691 they fail to question the correctness of Philibert Delorme's statement that the door of the Pantheon narrows toward the top.<sup>54</sup> A glance at Desgodets' engraving of the door would have enlightened them. Two years later they read Delorme's work systematically. It is only now that they suddenly seem to remember the copy of the *Édifices* in their library. On November 4, 1693, they check the measurements for the entablature of the Temple of Castor and Pollux against "les dessins du sieur Des Godets" and find that even Palladio "s'est éloigné de l'antique." They are now in a position to reject Delorme's statement about the door of the Pantheon since "the most exact measurements of this building do not confirm what Delorme reports."<sup>55</sup> It seems that at long last the Academy has been impressed by Desgodets' work: they examine it thoroughly immediately after the reading of Delorme's book has been completed.<sup>56</sup>

In the meantime Desgodets had moved up. Since 1680 he had been *Contrôleur* at Chambord; he was now promoted to the same position in Paris and had settled in the capital.<sup>57</sup> One wonders if it is just coincidence that immediately after the completion of the examination of Desgodets' book the Assembly is informed of the King's wish that they receive Desgodets so that he can assist in the meetings.<sup>58</sup> From now on he is mentioned several times as an authority on Roman buildings, par-

servile. Elle doit au contraire . . . ne s'entendre qu'aux choses de l'Antique qui en sont dignes. . . ."

49. Perrault, *Ordonnance*, p. II.

50. A few examples obviously taken over from Desgodets are: Pantheon, column 19 m 16½ p; Marcellus, plinth of base 11¼ p; Colosseum, pedestal Ionic Order 4 m 22 p; Fortuna Virilis, column shaft 22' 10", dia. 2' 11" etc. Significantly, not all figures in the tables have been taken from Desgodets as Perrault would then probably have found it difficult to arrive at the desired average.

Contrary to the custom of the time Perrault frankly admits the debt he owes to Desgodets. *Ordonnance*, p. XXVII: "Or bien que ce que je rapporte de l'Antique soit une chose plus difficile à vérifier que ce que j'ay pris dans les Modernes, le Livre que Mr. Desgodets a depuis peu fait imprimer des Anciens Édifices de Rome, donnera une grande facilité aux Lecteurs qui seront curieux de s'instruire de ces choses, de mesme qu'il m'a servi pour savoir au juste les différentes proportions qui ont été prises par cet Architecte, avec une très grande exactitude."

51. *Procès-verb.*, December 19, 1687 and January 9, 1688 (II, pp. 153, 155).

52. *Ibid.*, August 19 and 26, 1689 (II, p. 182).

53. *Ibid.*, December 3, 1691 (II, p. 226).

54. *Ibid.*, II, pp. 269, 274.

55. *Ibid.*, March 15 and November 15, 1694 (II, pp. 277-291). But even now Rome is being asked to check up on Desgodets' measurements (see *Correspondance des Directeurs*, II, pp. 235, 239, 253).

56. *Comptes*, I, p. 1348. He became *Contrôleur* of Chambord in 1680 not in 1690 as stated in Thieme-Becker (cf. Arch. Natl., o<sup>1</sup> 1324, fol. 47. *Mémoire* dated August 15, 1692, about repairs at Chambord, written and signed by Desgodets). His salary rose from the initial 1200 l. to 1800 l. per annum (III, p. 788). He moved to Paris in May 1694, when compensation is paid to the tenant of a house in Rue du Chantre who had to evacuate it to make room for Desgodets and his wife (III, p. 992, and Lance, *Dictionnaire des Architectes*, p. 216). First payment as *Contrôleur* of Paris was made on April 24, 1695, for the last quarter of 1694 at a yearly salary of 3000 l. (III, p. 1189).

57. *Procès-verb.*, December 6, 1694 (II, p. 293).

ticularly when the Academy studies Blondel's *Cours*.<sup>58</sup> He himself took an increasingly active part in the discussions and, one feels, he indeed merited full membership when the next vacancy occurred.<sup>59</sup> He was still comparatively young when this honor was conferred upon him.

Six months later, on February 5, 1699, he was dismissed or resigned from his post as *Contrôleur*<sup>60</sup> and three months later when the Academy was reorganized he was the only old member reduced to membership of the newly formed second class.<sup>61</sup> One can only surmise the cause of this downfall, but there can be little doubt that it must have appeared as a disgrace: the payment of salary up to an odd day of the month is unusual, but even more degrading, in an age where *préséance* and *ancienneté* played such an important part, was the fact that a member, junior to him in seniority, was included amongst the first class members and that other members of this class were even drawn from outside. Since, on the other hand, he continued to play a very active part in the Academy's life we can assume that whatever the reason for this misfortune, it cannot have been due to any dis-honorable act. The *Surintendant*, the Duc de Villacerf, had resigned on January 6 following the discovery of large scale embezzlements by his main *commis*.<sup>62</sup> Desgodets, who in 1698 attended almost every meeting of the Academy, was absent all through the winter of 1699. At the same time he discontinued his so far fairly regular attendance at the Academy of Painting, where he had been admitted in his capacity as honorary councilor.<sup>63</sup> It is possible that he, as *Contrôleur* of Paris, felt himself, together with his superior Villacerf, responsible for not having discovered earlier the *commis'* embezzlements and that, as in Villacerf's case, no reflection upon his honesty was made.<sup>64</sup>

But at the same time these events slowed down his career as Academician. He had to wait for almost twenty years and to see many of the younger members move up before, during a reorganization of the Academy in March 1718, he was made a member of the first class.<sup>65</sup> A month later De la Hire, the professor at the Academy, died. Desgodets was then sixty-five years of age. When

58. *Ibid.*, in 1696 (II, pp. 323, 335, 337), in 1697 (III, p. 3), in 1698 (III, p. 37). Again in 1700 when his book was used as a check on Palladio's reconstructions (III, p. 106), in 1703 for the same purpose on Delorme's reproductions (III, p. 184), in 1706 when Fréart was studied and once more extensively as a check on Palladio in 1713 (IV, pp. 25ff.).

59. *Procès-verb.*, July 28, 1698 (III, p. 44). Also Arch. Nat. o<sup>1</sup> 1930: *Mémoire* by Dorbay on history of Academy and o<sup>1</sup> 42, fol. 231. Dorbay, whose place Desgodets took, had died on September 9, 1697.

60. *Comptes*, IV, p. 551: "Au Sr. Desgodets, contrôleur à Paris pour ses apointemens des trois derniers mois 1698, du mois de janvier et des cinq premiers jours du mois de février, y compris 350 l. pour les gages de son commis. . . . 1400 l." (Payments made between January 15 and 22, 1699.)

61. *Procès-verb.*, May 5, 1699 (III, p. 63).

62. *Correspondance des Directeurs*, II, pp. 440ff.

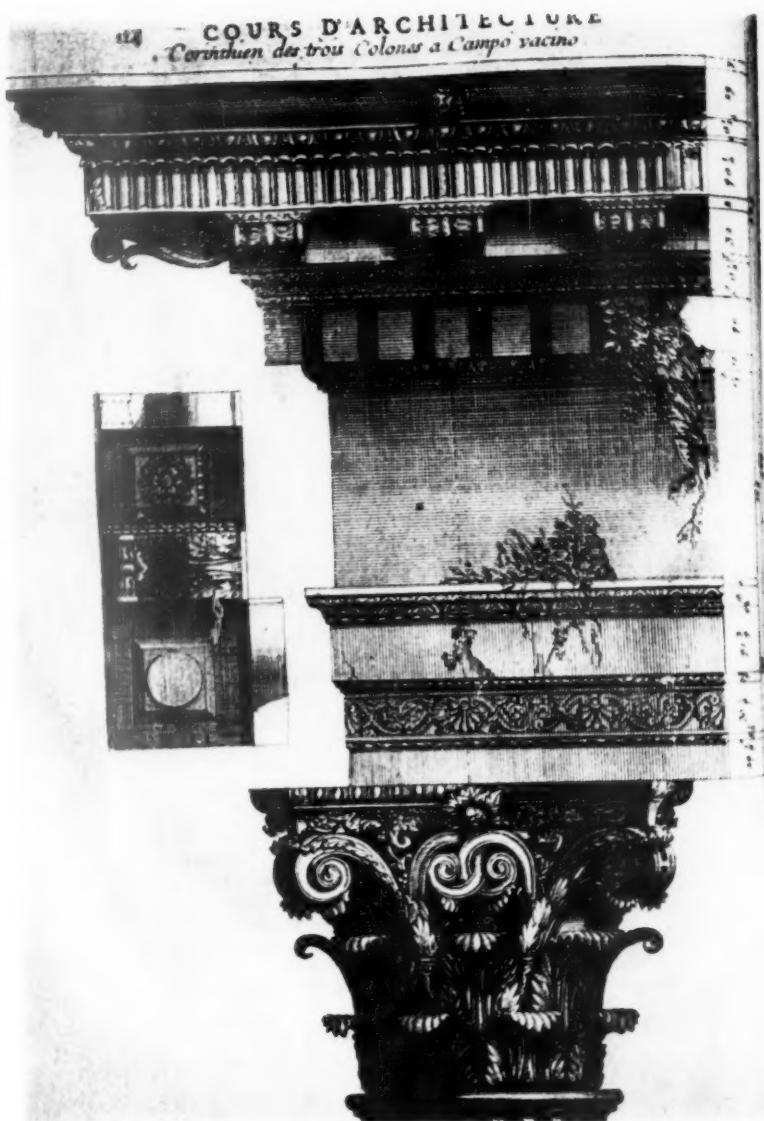
63. *Procès-verbaux de l'Académie Royale de Peinture et de Sculpture*, publ. par A. Montaiglon, Paris, 1875, III, p. 147, and Vitet, *L'Académie de Peinture*, p. 348.

64. Blomfield, *History of French Architecture*, II, p. 22, mistakenly believes that Desgodets held the appointment of *Contrôleur* of Paris together with those of Chambord and of *Architecte du Roi* and cites this case as an example for the astonishing "number of offices these architects managed to combine." Whatever truth there is in the "generous disposal" of funds by Mansart in the way of salaries, Desgodets had certainly no share in it. He did not retain the post of *Contrôleur* of Chambord which was held from 1696-1698 by a Sr. Gabriel (*Comptes*, IV, pp. 123, 267, 402, 413) and the appointment of *Contrôleur* of Paris was taken over in 1699 by De Cotte and retained by him until Mansart's death (*Comptes*, IV and V, *passim*, first payment on April 5). Blomfield also states that in 1711 Desgodets was a *Contrôleur général* at a salary of 4000 l. though the relevant entry in the *Comptes* (V, p. 564) is clearly a misprint for Desgots as evidenced by

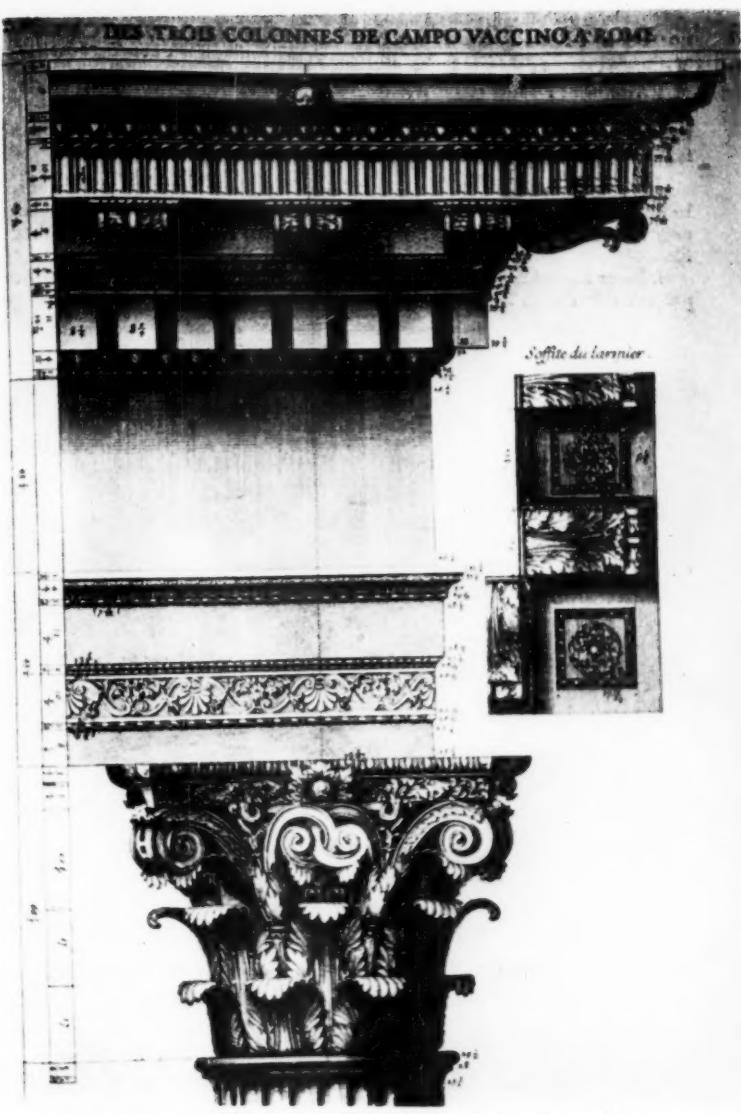
*Comptes*, V, pp. 468, 647, 737, etc., and also by the index to *Comptes*, V.

There can be no doubt that Desgodets' income was greatly reduced after February 5, 1699. As *Contrôleur* he had received 3000 l.; in addition an annual sum of 2000 l. had been accorded to him in November 1698 in his capacity as *Architecte du Roy* (Arch. Nat. o<sup>1</sup> 1083, fol. 246), a payment granted to only a few members of the Academy. He now retained only this salary of 2000 l. and since it is the only payment mentioned in the *Comptes* after February 5, 1699, it must also have been meant as compensation for his function as Director of the Gobelins; this had already been one of his duties as *Contrôleur* (J. Guiffrey, *Les manufactures parisiennes de tapisseries au XVIIe siècle*, 1892, pp. 167, 214, 224) and he continued to exercise it according to J. Guiffrey (*Les manufactures nationales des tapisseries*, Paris, 1908, p. 38) until 1706 though, it seems, in a subaltern position (see *Mémoire* submitted by the *Tapisseur* Jans, Arch. Nat. o<sup>1</sup> 2040 B). As he also lost payment of the Academy's attendance fees, which was restored in 1699, but for first class members only, the actual and potential reduction amounted to almost two thirds. Stoppage of salary on an odd day was in itself not wholly unusual, but in such cases a new appointment followed immediately (see *Comptes*, V, pp. 397 and 388 *sub Desgots*). This was not so with Desgodets. On the contrary, a heavy reduction in income together with his transmission to the second-class membership makes his case most unusual. (The payment of 2000 l. was canceled with the accession of Louis XV, Arch. Nat. o<sup>1</sup> 2216-2228). An application by Desgodets, dated December 17, 1715 "de luy conserver les 2000 l. d'apointemens" which were granted to him "par Brevet du 23e Novembre 1698" is preserved in Arch. Nat. o<sup>1</sup> 1083 fol. 246.

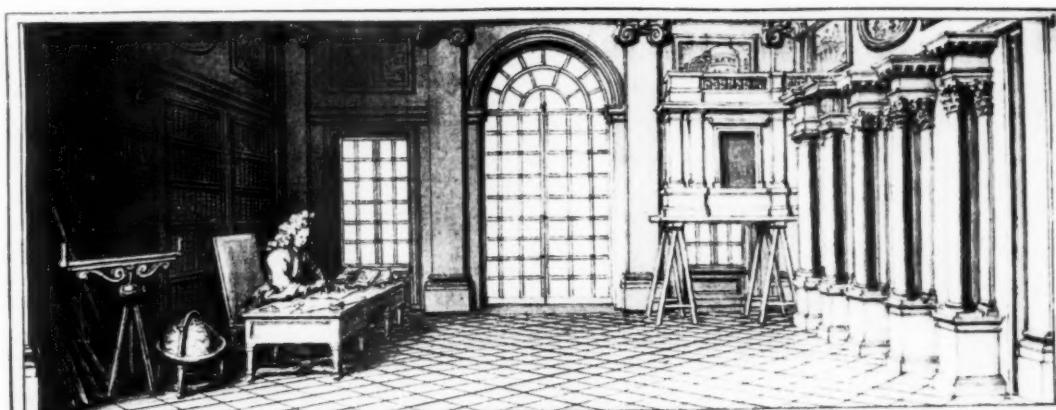
65. The *Brevet* is dated March 31, 1718 (Arch. Nat. o<sup>1</sup> 62, fol. 53 and *Procès-verb.*, IV, p. 151).



1. Temple of Castor and Pollux, capital and entablature  
(From Fr. Blondel, *Cours d'Architecture*, Paris, 1683)



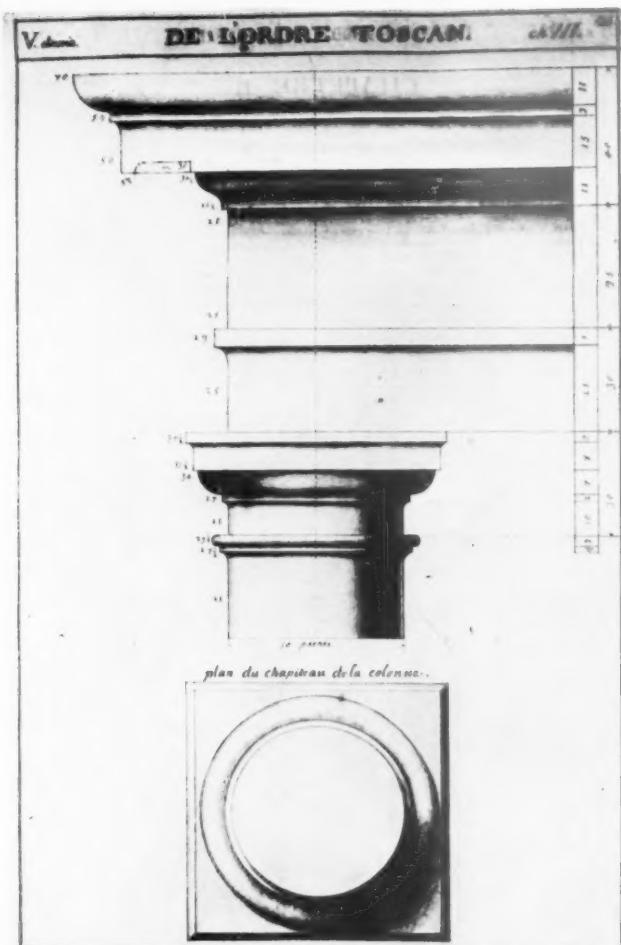
2. Temple of Castor and Pollux, capital and entablature  
(From A. Desgodets, *Les édifices antiques de Rome*, Paris, 1682)



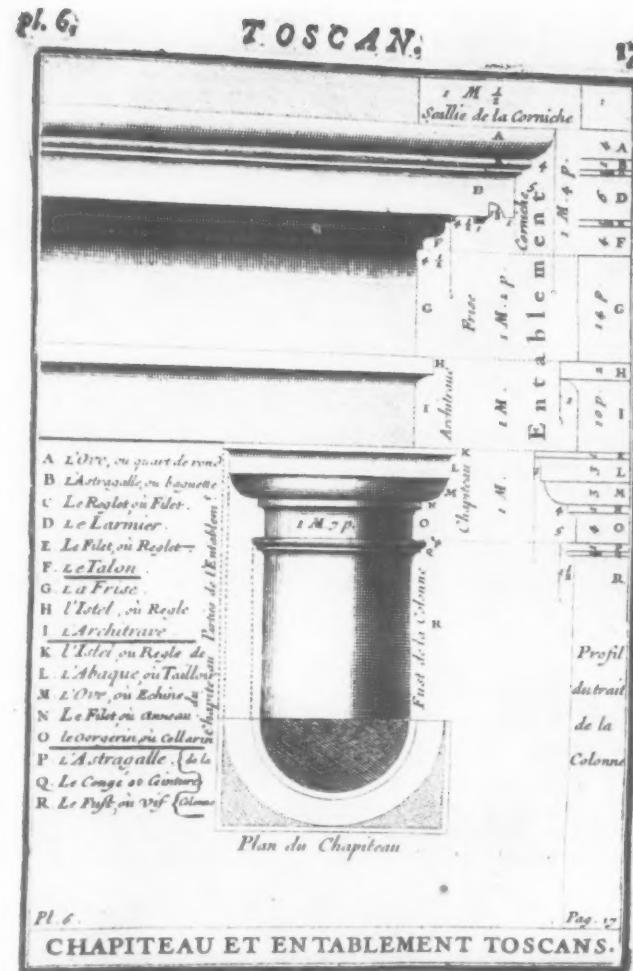
TRAITÉ DES ORDRES  
D'ARCHITECTURE  
CHAPITRE I.

DES PROFILS DES MOULURES ET DES COLONNES

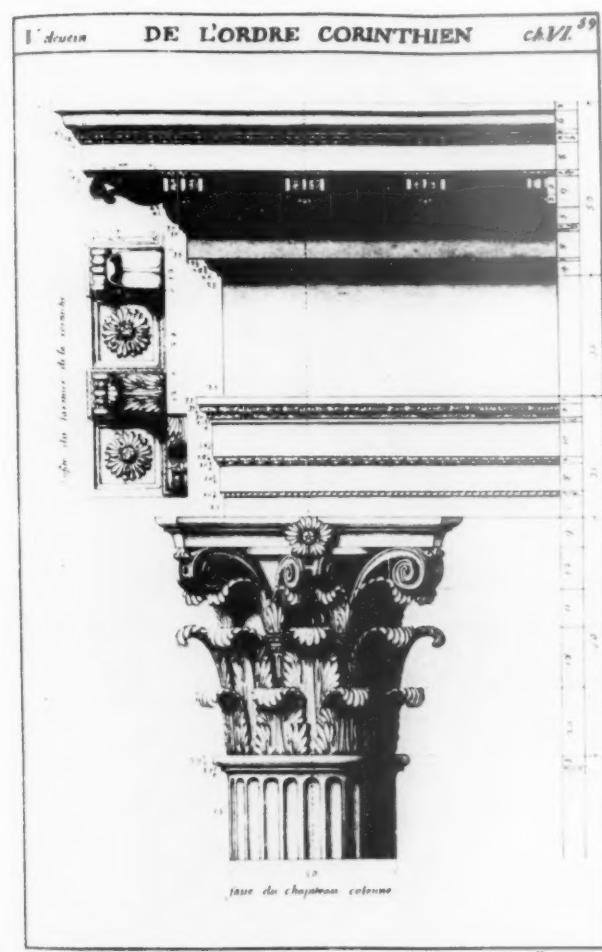
3. Architect in His Study (Vignette from Desgodets, *Traité des Ordres d'Architecture*)  
Paris, Bibl. de l'Institut



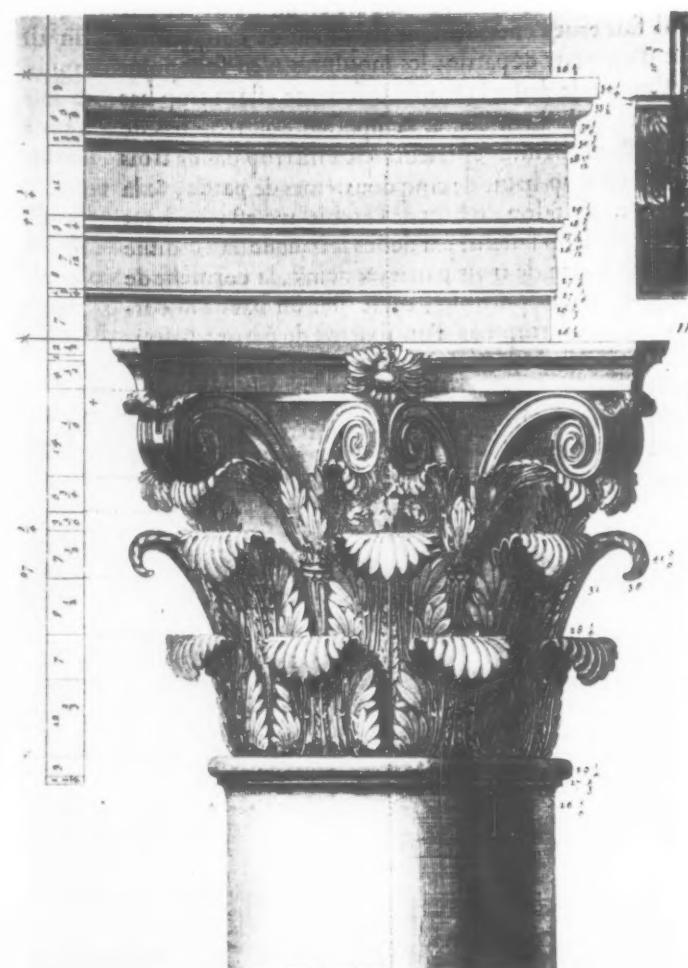
4. Tuscan Order (From Desgodets, *Traité des Ordres d'Architecture*). Paris, Bibl. de l'Institut



5. Tuscan Order, after Vignola (From Daviler, *Cours d'Architecture*, Paris, 1691)



6. Corinthian Capital (From Desgodets, *Traité des Ordres d'Architecture*). Paris, Bibl. de l'Institut



7. Rome, Pantheon, Corinthian capital (From Desgodets, *Les édifices antiques de Rome*, Paris, 1682)

the son of De la Hire, almost twenty-five years younger, was appointed as his father's successor, Desgodets must have given up hope of ever gaining the position. It was a position which he must have felt himself eminently capable of filling. A year later the young De la Hire died. It is a sign of the great esteem in which his colleagues held him, but possibly also of the lack of a suitable theoretician amongst the younger generation, that at the age of sixty-six Desgodets was appointed professor at the Academy of Architecture.<sup>66</sup>

#### Desgodets' *Cours*

It was during the height of the Regency and in a year when the financial operations of John Law seemed at last to secure prosperity for France that the new professor was installed. The death of Louis XIV and the end of a regime which had lasted for over seventy years did not coincide, in the spheres of the intellectual and artistic life of France, with any decisive break with the past. The Academy was no exception. Desgodets was a man of the last century—at least in age. The only new feature to be seen in this appointment was the fact that, for the first time, a professional architect was chosen for the position of professor.

We have a fairly extensive knowledge of the material presented to the students in the public lectures held twice weekly. The *Cours* as read by Blondel begins with the Orders and, since they take up the greater part of the first volume, Blondel obviously attached great importance to them. The method that he applied was the one so successfully introduced by Fréart de Chambray in 1650 when he tried to clarify problems by drawing a parallel between various authors. Unlike Fréart, Blondel includes among them Vitruvius, whom he contrasts to Vignola, Palladio, and Scamozzi. His own opinion is not stated explicitly, either in the text or by way of illustration, but is to be extracted from his critical remarks on the four writers or from his analysis of ancient monuments. It cannot have been very easy for a student to elicit from this mass of detailed information a hard and fast rule, nor can it have been Blondel's intention to provide him with one. Having dealt in great detail with the Orders and all the problems arising out of the application of classical forms to modern buildings, he widens the range of subjects and deals comprehensively with general questions like those of proportion and beauty.

His successor, De la Hire, also intended to publish his lecture courses, but nothing came of it. The manuscript, however, has been preserved in the Library of the Royal Institute of British Architects.<sup>67</sup> It shows that he followed more closely than Blondel the pattern of books on architectural theory as handed down by Vitruvius and revived by Palladio. Starting with instructions for the selection and preparation of the ground and the execution of drawings, he allocates one very extensive chapter to the treatment of the five Orders. On the whole his *Cours* was a far more balanced survey of the architectural discipline than Blondel's had been. But, coming from a man who was primarily a mathematician, it was bound to be considerably less authoritative in its judgments and less original in its treatment. Even so—or rather because of its moderate accomplishment—it can be useful in conveying opinions which were commonly accepted at this time.

When Desgodets took over, he began his course with lectures on the five Orders. He, too, seems to have planned the publication of his *Cours* but, like De la Hire, he never found a publisher. Fortunately, in his case too, the manuscript has survived.

66. Blomfield (*op.cit.*, II, p. 22) makes him succeed De la Hire in 1714, which obviously is a mistake as is also Blomfield's statement (I, p. 147) that Jacques Bruand *filis* became professor at the Academy in 1699. He must have confused him with François Bruand, who was Desgodets' successor in 1728.

Desgodets was well above the average age at which the Academy's professor was usually elected (about fifty years). François Blondel was fifty-three; Courtonne, who became

Desgodets' real successor, since Bruand resigned within two years, was fifty-nine.

67. MS 725, *Architecture civile par Mr. de la Hire de l'Académie des Sciences et professeur royal d'Architecture*. That this manuscript is identical with the *Cours d'Architecture* which De la Hire read to the Academy between October 1698 and May 1699 is proved by the exact correspondence between the headings as mentioned in the minutes (*Procès-verb.*, III, pp. 51-62) and those given in the manuscript.

Actually several copies have been preserved, all of them written presumably in 1745, almost twenty years after Desgodets' death. Nevertheless, from the titles of two of the copies it becomes evident that they contain the *Cours d'Architecture* as dictated by Desgodets. In addition, one of the manuscripts bears the date 1725. Without any doubt we possess in these manuscripts the course of lectures as Desgodets read them in the years between his appointment in 1719 and his death in 1728, and it is to these manuscripts that the minutes of the Academy often refer.<sup>68</sup> However, a further manuscript of a *Traité des Ordres d'Architecture par Antoine Desgodets, architecte du Roy* in the Library of the Institut de France reveals that the major part of the material for his lectures was based on a book written before his appointment as professor. In fact, when he composed his *Cours* he copied to a considerable extent from this older work, altering and enlarging only occasionally, apart from interspersing here and there some additional chapters.<sup>69</sup> A note, possibly in Desgodets' handwriting, informs us that this book was presented to the nine-year-old Louis XV when, on August 2, 1719, he honored the Academy with his presence.<sup>70</sup> Possibly this visit took place on very short notice and the newly installed professor, appointed only six weeks earlier, could not have been expected to produce a book specially written for the occasion. To find a way out of the predicament a manuscript was used which was in a fit state to be presented to the King since Desgodets had written and prepared it for publication some time previously. But there was an obstacle. The book started with a beautifully composed dedication to the King; not, however, to the present King, but to Louis XIV. Consequently a new dedication was written and carefully glued over the old one, making use of the noncommittal line "Au Roy, Sire" and the equally appropriate signature. From this it can be inferred that the major part of the material for Desgodets' lectures was already worked out by him before 1715.<sup>71</sup> A document in the Archives Nationales, found very late in the research for this paper, confirms that the manuscript was finished by 1711.<sup>72</sup> Yet it is possible to trace its origins even further back.

68. I have studied three copies:

1. Paris, Bibl. Nat., Cabinet des Estampes, Ha 23 and 23a. Vol. I (219 pp. and 62 pls.); Vol. II (204 pp. and 42 pls.).
2. Paris, Bibl. de l'Arsenal, ms 2545 (308 pp.).
3. London, Library of the Royal Institute of British Architects, ms 72 fol. (310 pp.) (cited hereafter as RIBA).

Mlle. Duportal ("Le 'Cours d'architecture' de Desgodets," *Revue de l'art ancien et moderne*, 1914-1919, pp. 153-157) describes the copy of the Bibl. Nat., the only one known to her. The text of the three copies differs slightly but not significantly. The copy of the Bibl. Nat. is the best. It is the only one containing the drawings and also the only one preserving the second part of the *Cours*; both volumes have the collective title: *Oeuvres de Desgodets*.

The first volume is headed: Bibl. Nat.: *Traité des Ordres de l'Architecture de Monsieur Desgodets Architecte du Roy, et Professeur de l'Académie Royale. Arsenal: Traité des Ordres d'Architecture . . . Dicté par Mr. Degodetz en 1725.* RIBA: *Cours d'Architecture, dicté par Mr. Desgodetz, Architecte du Roy.* The date when these copies must have been written can now be more accurately fixed with the help of the Arsenal copy. The other two copies are written on paper showing watermarks with the date 1742 "of little use beyond supplying an anterior date . . ." (E. Heawood, *Watermarks*, 1950, p. 31). The watermark of the Arsenal copy, however, bears the date 1743. This means that the paper was manufactured in that year and used probably within the next two to three years (*ibid.*, p. 31). The most probable date is 1745. In that year another unpublished work by Desgodets, the *Toisé des Bastimens*, was copied from a manuscript written down in 1724 (Bibl. de l'Arsenal, mss 2530 and 2531).

I should like to take this opportunity of expressing my gratitude to the Librarian of the RIBA and his staff for the constant assistance which I received from them.

69. Paris, Bibl. de l'Institut, ms 1031 (111 pp.). Lemonnier, in a short appendix to *Procès-verbal*, IV, p. 352, mentions this manuscript, which he wrongly supposes to reproduce the lecture courses. The prefaces are identical in both manuscripts; yet, at some later period Desgodets must have felt that the preface had by then become out of date and composed a new one, which, however, has not been preserved (*Procès-verbal*, November 27, 1724, IV, p. 294). I wish to express my thanks to the Secretary of the Bibliothèque de l'Institut for permitting me to study this manuscript.

70. "Ce traité des Ordres d'architecture a été présenté au Roy Louis quinze le 2 aout 1719 entre onze heures et midi lorsque sa Majesté honora l'académie d'architecture de sa présence."

71. It is from the older dedication that we learn of Desgodets' employment by the *Département des Bâtiments* since 1669. The dedication starts: "Les bontez que Vostre Majesté a toujours eues pour moy depuis qu'elle m'a fait l'honneur de m'admettre à son service dans ses bâtimens en l'année 1669. . . ." Otherwise the dedication is put in the usual eulogistic terms. The only other point of interest occurs when Desgodets mentions "l'étude que j'ai fait des principes de l'Architecture par la recherche des proportions . . . et . . . par la lecture . . . des auteurs . . . et par les Conférences que j'ay eue avec les Architectes de Vostre Majesté en l'Académie d'Architecture où il a plu à Vostre Majesté de me donner une place." This gives as *terminus ante* the date July 28, 1698 (see note 59).

72. Arch. Nat. o<sup>1</sup> 1087, fol. 64 "Approbation accordée au Sr. Desgodetz pour faire imprimer un *Traité des Ordres d'Architecture* du 13 janvier 1712. Louis Antoine . . . Duc d'Autin . . . apres avoir veu et fait examiner un Libre intitulé: *Traité des Ordres d'Architecture que le Sr. Desgodetz architecte du Roy a présenté et dédié à sa Majesté, avons approuvé qu'il le fasse graver et imprimer comme pouvant être*

From time to time members of the Academy remembered one of the original directions given to them when the Academy was formed, namely to make use of their authority by fixing definite rules. This was done for the first time in 1689. The minutes are in this instance particularly laconic so that all we know is that the various Orders were discussed, that the "divisions and measurements" were finally regulated, and that official drawings laying down these rules had been made.<sup>73</sup>

Some years later, in 1700, the Academy examined Palladio's reconstructions of Roman monuments with the help of Desgodets' *Édifices*. Once again the discussions revealed the many deviations noticeable in antique buildings and the disagreement, even between Palladio and the Academy, on what was to be considered the accepted norm. Accordingly, members had recourse to the old drawings of 1689, and finding them apparently either obsolete or not detailed enough, they instructed Desgodets to prepare a rough drawing incorporating the results of their discussion. A first drawing of the Tuscan Order made by Desgodets was subjected to a renewed discussion. The opinions of other authors were examined and finally all details were formulated. More or less the same procedure was followed with the other Orders. Each time, after lengthy discussions, details were fixed, and in the end Desgodets' final set of drawings, the result of four months' work, was submitted to the *Surintendant*, who suggested the preparation of large-scale drawings from which models could be made. Again Desgodets was commissioned to do this work, which took almost a year to complete. As before, discussions took place and changes were suggested before these large drawings were finally approved. For most Orders Desgodets composed *mémoires* which, it was agreed, should be joined to the drawings.<sup>74</sup> At long last, at the beginning of 1702, Desgodets was asked to prepare models, but a few weeks later he received orders from the *Surintendant* to hand the set of drawings over to De Cotte.<sup>75</sup> The models, it seems, were never executed. Naturally, it would have given Desgodets some satisfaction to see his drawings become the basis of large-scale models to be kept forever in the Academy, and it is quite possible that, spurred on by his disappointment, he composed his *Traité*.

The vignette at the head of the first chapter almost seems to illustrate this episode: an architect in his "study" sitting at his desk, compass in hand, and open books next to him. On the opposite wall tall models of the five Orders are placed before a screen with the Attic order on one side raised on a scaffold. The upper parts of the walls of this stately room are decorated with paintings of Roman antiquities of which the temple of Castor and Pollux and the Pantheon are clearly recognizable. Bookshelves, taking up the whole wall behind the architect's desk, and a globe and large level attest his great erudition (Fig. 3).<sup>76</sup>

Throughout the year 1701, Desgodets was engaged in designing the five Orders, in discussing with his colleagues the problems that seemed to them to be of paramount importance, and finally in summing up their deliberations in *mémoires*. Surely it is reasonable to assume that Desgodets soon made use of the wide theoretical knowledge which he had thus acquired and started to compose his *Traité des Ordres d'Architecture*. In any case it certainly reproduced faithfully the official doctrine as evolved by the Academy and can therefore enlist a wider interest echoing, as it does, something weightier than Desgodets' personal opinion in this matter. Of course, only the doctrine of this particular period could have found its way into Desgodets' book, but one should not lose sight of the rigidity of the classical, and especially French, doctrine, with its narrow and well-

utile à ceux qui se mêlent d'Architecture; Pourquoys nous suivant l'intention de sa Majesté luy permettons d'en obtenir le privilège en Chancellerie . . . A Versailles le 13e jour de janvier 1712." The following interesting note is added: "il a été représenté à M. les Chanceliers de ne point accorder de privilège de faire imprimer et graver aucune livre d'Architecture sans l'approbation du Sur-intendant."

73. *Procès-verb.*, February 4 to September 2, 1689 (II, pp. 174-182).

74. *Ibid.*, January 4 to November 7, 1701 (III, pp. 120-138).

75. *Ibid.*, January 9 and 30, 1702 (III, pp. 143f.)

76. The representative character of the architect's study (as well as his dress) suggests that he is a person of high standing. Yet, it is unlikely that the room is a reproduction of the office of the *Surintendant*, particularly as the end wall shows a "Palladian" window which, so far as I can see, was a motif unknown to French architecture of the time.

defined limits. In this connection it may be of some significance that whole chapters of this early manuscript were retained by Desgodets almost word for word when he prepared his lectures nearly ten years later, and that the theory of the beginning of the century was still thought to be of interest to those for whom the lectures were copied almost 40 years later.<sup>77</sup>

### The Five Orders in seventeenth century France: Trend Towards Standardization

The book is—at least at first glance—disappointingly conventional. Its general layout is based on the one originated by Vignola, whose book had been popularized by numerous editions.<sup>78</sup> Mlle. Duportal, who first drew attention to Desgodets' manuscript in the Bibliothèque Nationale, was of the opinion that the first volume hardly differs from the various lecture courses as published by Blondel, Daviler, and Leclerc, and complains: "it is again a study of the Orders and proportions."<sup>79</sup> This is perfectly true. The preoccupation with the five Orders in which the architectural theory since the Renaissance was immersed and the fascination which their proportions exercised is almost incomprehensible to us. We easily gain the impression of a vast overproduction in works dealing with this subject, but in actual fact, leaving out new editions of older works like those of Bullant and Delorme, or new translations and interpretations such as those of Palladio, Scamozzi and Vignola, there were few original works published in France during the seventeenth century that dealt specifically with the five Orders. Earlier works were overshadowed by Fréart's *Parallèle*, a work of outstanding importance, but one not intended to present his own version of the Orders. After Fréart there was Abraham Bosse's *Traité* of 1664 and Jean le Blond's of 1683, but as both were printed from engraved plates they were restricted in quantities.<sup>80</sup> The first part of Blondel's *Cours* dealt exclusively with the Orders. He followed, as already mentioned, the system of the *Parallèle* without, however, coming anywhere near Fréart's persuasive power, which stemmed from his own faith in the message he wished to convey. Blondel's book, overburdened with a flood of letters referring to the accompanying illustrations, could hardly appeal to the average architect or builder. In contrast to all these books, Claude Perrault's *Ordonnance* of 1683 is a highly original work though more in its reasoning than in its results. Because of its challenging nature, it can never have been used as a convenient handbook, nor was it, for that matter, meant to be one. The

77. It might be possible to trace the origins of the *Traité* still further if the two *mémoires* by Desgodets, one on *diminution* the other on *renflement*, could be studied (cf. *Procès-verb.*, October 5 and 12, 1699, III, pp. 78f.). Lemonnier apparently saw them but, despite his note to the contrary, did not reproduce them. The archives of the Académie des Beaux-Arts in the Institut are at present inaccessible because of construction in progress.

There is also a slight indication that Desgodets may have written about architecture before 1691. A. C. Daviler, *Cours d'Architecture qui comprend les Ordres de Vignole*, Paris, 1691, Table sub Desgodets: "Architecte, qui a écrit de l'Architecture, a mesuré les Édifices antiques de Rome." Though "a écrit de l'architecture" is a standard phrase of Daviler for every author it is just possible that by "écrit" and "mesuré" he refers to two separate works (cf.: "Perrault . . . a traduit . . . Vitruve et a écrit de l'Architecture").

The lecture course of Desgodets' successor, J. Courtonne, has also survived in the MS 1032 of the Bibl. de l'Institut. It is entitled: *Nouveaux essais sur l'Architecture*. The Catalogue names Desgodets as author on the basis of a handwritten note. The manuscript is probably identical with the one presented to the Academy on May 4, 1779 (*Procès-verb.*, VIII, p. 380) as a "manuscrit de feu Desgodets." However, the text makes it quite clear that its author is Courtonne. He not only mentions his *Traité de Perspective* (fol. 82) but, referring to the Hotel Matignon, he apologizes: "On me pardonnera bien si je rapporte . . . l'hôtel de Matignon . . . on ne doit pas la regarder ici comme mon ouvrage mais comme un de ces choses

qui sont exposées à la critique de tout le monde . . ." (fol. 86). The date can be fixed through reference to the meeting of November 23, 1733 (v, p. 130): "M. Courtonne a lu à la Compagnie la préface d'un manuscrit intitulé: *Nouveaux essais d'architecture*."

We have thus an almost uninterrupted line of academic lecture courses. First Fr. Blondel's *Cours* followed by De la Hire's *Architecture civile*, Desgodets' *Traité des Ordres* and *Traité de la Commodité* (Vol. II of the manuscript in the Bibl. Nat.) and Courtonne's *Nouveaux essais*. There is a gap of twenty-three years (the period of Jossenay and Loriot) and the series is then concluded by J.-F. Blondel's *Cours d'Architecture* (publication commenced in 1771).

78. The most recent edition had been the one published by Desgodets' traveling companion, Daviler, *op.cit.*, 1st ed., 1691; 2nd ed., 1696; 3rd ed., 1699.

79. *Op.cit.*, p. 154.

80. Julien Mauclerc, *Le premier Livre d'Architecture*, Rochelle, 1600.

Fremin de Cotte, *Explication facile et briefve des cinq ordres d'Architecture*, Paris, 1644.

Julien Mauclerc, *Traité de l'Architecture suivant Vitruve . . . et mis en lumière par Pierre Daret*, Paris, 1648. Roland Fréart de Chambray, *Parallèle de l'Architecture antique et de la moderne*, Paris, 1650.

Abraham Bosse, *Traité des manières de dessiner les ordres de l'Architecture antique en toutes leurs parties*, Paris, 1664.

Jean Le Blond, *Deux exemples des cinq ordres de l'Architecture antique*, Paris, 1683.

manner of indicating the proportional relationship of the various parts only, and not the common module, made the comparison with previous interpretations difficult and restricted its usefulness still further.

Perrault was the last author to write on the Orders before the discussions that took place in the Academy twenty years later. It is, therefore, understandable that Desgodets thought that there would be a demand for a book on the Orders, set out in an easily understandable manner, that would keep to a middle course between Vignola's laconic and Blondel's verbose style. It should have been possible for the reader to be able to refer to the illustrations without consulting the text if it was to have been useful as a handbook. One of the great disadvantages of almost all previous books on the subject had been the inability of the authors to indicate all the dimensions without confusing the drawing. Desgodets had had to solve this problem before, at the time when he published his *Édifices*. He had followed and improved upon Fréart's way of indicating the measurements in the margin. The very clear marking of Desgodets' drawings and the resultant ease with which they can be consulted was not the least of many causes for the long fame of his work. He made use of the same method in his *Traité*.

Desgodets followed Vignola by repeating exactly the sequence of illustrating first a peristyle of isolated columns, then arcades framed by columns with and without pedestals and finally a base on a pedestal and a capital under entablature. But he also took over many of Vignola's proportions. The Tuscan Order is almost in its entirety adopted from the Italian author (Figs. 4, 5). Where Desgodets deviates in details, as in the profiles of the cornice and of the pedestal, he tends to prefer plainer forms, and of those the most primitive ones available. The same tendency is noticeable in the Doric Order where he still follows Vignola closely.

The whole system of the Orders as restated in one treatise after another often leaves the modern reader with the impression of a self-sufficient and esoteric science. Yet, it is equally apparent that these often minute variations were considered to be important and were noticed by those who had been visually and intellectually trained in the differentiation of the so-called good and bad taste. Only by following up these observations and by going into very small and seemingly petty differences is it possible to reach an appraisal of the strangely keen interest that most architects of the seventeenth and eighteenth century took in this branch of their art. One example may serve as an illustration.

The minutes of the Academy's meetings of 1701 summarizing the members' deliberations very rarely touch on details. In one instance, however, when the base of the Corinthian column had been discussed, a particular point was mentioned. The secretary noted that, after examination of Desgodets' drawing, "it was thought advisable to make a different design which would show only one astragal between two scotia instead of two astragals. . . ."<sup>81</sup> Desgodets' drawing gave the Ionic-Attic combination normal for a Corinthian base of which the most famous antique model was that of the Temple of Castor and Pollux. The drawing showed, approximately in the middle of the base proper, two astragals, the thickness of each on the antique example being hardly more than one inch. We do not know what was the Academy's final choice but we notice from Desgodets' *Traité* that he retained the two astragals for the Corinthian and restricted himself to one in the Composite base. In that decision he followed, as in so many other instances, Vignola's lead. To us it seems to be of very little consequence but to Daviler, who wrote only a few years before this meeting, the very same question assumed a significance completely lost on us. "The base of [the Composite]," he remarks, "looks more beautiful than the Corinthian because it has not this double astragal which is something weak (*chétif*): this small distinction makes all the dif-

81. *Procès-verb.*, August 1, 1701 (III, p. 132).

ference. . . ."<sup>82</sup> It could be called a petty observation, but it is also evidence of a degree of visual training that goes some way to explain the rise of French classical architecture.

The remaining three Orders show Desgodets to be somewhat less dependent on Vignola than he was in the case of the Tuscan and the Doric. Yet, on the whole, it is still proper to say that Vignola was his main guide. This attitude was not due to his personal predilection but was the expression of a viewpoint common to the French theory as a whole. Vignola was for the architectural French writers of the seventeenth century the most congenial of the great Italian authors. The tendency for standardization, for eliminating singularity, for curbing the disrupting effect of the individual, a tendency that in this particular field was but the reflection of the national trend of the age—this they found confirmed in Vignola. No other country outside Italy had published as many editions of the *Regola delle cinque ordini* as France.<sup>83</sup> The Academy, having been formed for the purpose of fixing definite rules, could expect to receive the greatest help in their task from Vignola. Admittedly their members, right back in the first year of the Academy's existence, allotted to him only the third place in the official hierarchy headed by Palladio and Scamozzi. Evidently this remained their opinion for some time. However, when they discussed the Orders in 1701 the only author mentioned and recommended is Vignola.<sup>84</sup> Shortly before this time De la Hire calls him "the most approved of all architects" whereas Palladio has to be satisfied with the compliment of being described as a "most excellent architect."<sup>85</sup> At about the same time Daviler is able to state that the proportions of Vignola's Orders "have been taken until now as the best amongst the Moderns."<sup>86</sup> Making a comparison between him and Palladio, he finds that Vignola's book is better than his actual buildings while "Palladio's badly executed book diminishes, compared to his buildings, the high esteem which one must have for an architect of his reputation."<sup>87</sup> It is, therefore, not unexpected to see the Academy, while examining Fréart's book in 1706, side sometimes with Vignola in preference to Palladio.<sup>88</sup>

This tendency to greater simplification is well illustrated by the way in which a particular problem was approached: to decide what height the entablature should have in relation to the column. The Academy dealt with this question frequently.

In this connection a decisive part was played by Claude Perrault. Though he may sometimes have been in conflict with the conventional opinions of his time he was, in his leaning towards easily related proportions, in full agreement with French architectural theory generally. The controversy which broke out over some of Perrault's opinions was not caused by his opposition to the general trend of the age, but precisely because he was its most enthusiastic adherent who, by overstating his case and not shrinking from the consequences provoked the opposition of his less radical even if more artistically minded contemporaries. He made every effort to simplify the proportions of the architectural Orders, and it is unlikely that the profession objected to this effort or to the tendency behind it. Otherwise the Academy would not have accepted one of the few real innovations that Perrault proposed, namely the standardization of the height of the entablature.

The problem that remained troublesome for some time was to find a formula to deal satisfactorily with the changing relation between the entablature and the column—changing because the proportions of the column vary from Order to Order. Vitruvius had divided the columns into three classes according to their height; each class was given an entablature of a different height increasing with the height of the column.<sup>89</sup> Apart from the fact that Vitruvius' formula resulted in tall columns having heavier entablatures than short and sturdy ones, which seemed to be unde-

82. Daviler, *Cours*, p. 80.

83. Hans Willich, *Giacomo Barozzi da Vignola*, Strasbourg, 1906, pp. 163f.

84. *Procès-verb.*, April 5 and June 6, 1701 (III, pp. 125, 129).

85. Royal Inst. Brit. Arch., MS 725, p. 67.

86. *Op.cit.*, p. IV.

87. *Ibid.*, p. III.

88. *Procès-verb.*, III, pp. 246, 250.

89. Book III, 3.

sirable from the point of view of apparent stability, it was also unsatisfactory through its arbitrary character. Moreover, it was found that the ancient buildings did not follow this rule but, on the contrary, showed a disturbing variety of proportions. Vignola, taking his cue from another rule given elsewhere by Vitruvius,<sup>90</sup> fixed the height of the entablature on all Orders to a fourth of the height of the column. This solution in itself should have appealed to the desire of the French theory for uniform treatment. But it was found that it did not save Vignola from another pitfall. A proportion of one to four which was acceptable for the Tuscan or Doric Order, was felt to be clumsy for the others. Perrault recognized that no satisfactory result could be achieved by trying to take the uniform measure from the height of the column. On the other hand, to let things slide back to the purely empirical and individualistic stage was very much against his principles. His intention was to combine the solutions of Vitruvius and Vignola without having to accept their disadvantages. His new standard, which seemed to fulfill these conditions, was based on the diameter of the columns, two of which in each Order gave the height of the entablature. This device, simple in application, nevertheless left the proportions variable from Order to Order but now in such a way that they conformed to the general taste of the period. The Academy decided to accept this system, though not mentioning Perrault's authorship.<sup>91</sup> Desgodets, parting at this point from Vignola, followed exactly the Academy's resolution to which, no doubt, he had made his contribution.

Although in all important aspects Desgodets fashioned his own book after Vignola's, he never in any way acknowledged the debt. On the other hand, he declared frankly that the antique buildings served him as models and that he hoped his designs would stand comparison with the best of them. Notwithstanding this avowal there are not many instances where a detailed examination of his proportions reveals them to be closely dependent on particular models. An exception is his design for a Corinthian capital. Most of the theoretical writers like Palladio, Scamozzi, Vignola and Alberti followed a very simple division between the two rows of leaves, the volutes and the abacus, a proportion derived from Vitruvius. Desgodets, in this instance, abandoned the advantage of a simple ratio and followed closely the Corinthian capital of the Pantheon, modifying it only slightly (Figs. 6, 7).<sup>92</sup> This is, however, the only case where he definitely rejected the simplification presented by the theory in favor of the more subtle proportioning as shown by an antique building. In another instance he proposed a Doric base formed very closely after that of the Temple of Vesta in Tivoli. Apart from these two cases he often referred in a general way to the ancient monuments as examples that should be followed but, on the whole, it is correct to say that the author of the *Édifices antiques de Rome*, who had checked the individual proportions of almost all the Roman buildings down to the smallest detail, followed as an author of the *Ordres d'Architecture* the theory and not the reality of the ancient monuments.<sup>93</sup>

#### The Role of Vitruvius

That is to say, Desgodets followed the theory as developed over the preceding two hundred years; his references to Vitruvius are remarkably rare. In this respect, too, Desgodets is the typical representative of his generation, which adopted a rather critical attitude towards Vitruvius.<sup>94</sup> It

90. Book V, 7.

91. *Procès-verb.*, March 21, 1701 (III, p. 124). The Tuscan entablature was excluded from this rule.

92. The usual proportions of a Corinthian capital are 20:20:20:10. Those of Desgodets are 20:18:23:9 and of the Pantheon (according to the *Édifices*) 19 2/3 : 17 : 23 1/6 : 8.

93. For the Doric entablature he refers to the Theater of Marcellus and for the Ionic angular capital to the Temple of Fortuna Virilis. Later, when Desgodets reshaped the *Traité* to fit in with his lectures, he left the proportions of the Orders

unchanged except for minor changes but he altered the text radically regarding citations of Roman examples. In this respect the later manuscript is indeed fully documented. Contrary to the early *Traité* he now parades proudly his expert knowledge. He cites the monuments either in order to criticize them or to justify his own preference for a particular proportion.

94. Cf. Louis Hautecœur, *Histoire de l'Architecture classique en France*, II, Paris, 1948, p. 474.

has been said that "the high opinion in which Vitruvius was held by the seventeenth century was quite extraordinary."<sup>95</sup> This view misses an important aspect in the development of the French theory during the second half of the century, because it is just the increasingly independent attitude that differentiates this generation from the preceding one. Not, of course, that Vitruvius' doctrine as a whole was attacked or even questioned; the importance of his book on architecture as the only theoretical writing transmitted from antiquity was fully appreciated. It was just at this time that Perrault was commissioned with its translation, the object of which, he explains in the Preface, was to establish by Vitruvius' authority "les véritables règles du beau et du parfait." Undoubtedly Vitruvius remained for the seventeenth century, as for the preceding and following centuries, a writer of unique prestige. Despite this fact it seems more desirable in this case to point out the variation in an underlying theme than to stress its fundamentally unchanged character. Vitruvius was still "un auteur célèbre et très vénérable aux architectes" as well as "père des architectes" and was acclaimed in similar terms by nearly all writers of the time. But it is just Fréart from whose book these, one feels somewhat outworn, epithets have been taken, who by his ardent admiration for the antique monuments fails to acknowledge Vitruvius' role as a directing and regulating authority.<sup>96</sup>

The message of Fréart's book is "to go back if possible to the source of the Orders,"<sup>97</sup> that is, to the study of the original monuments. "They are the best books that we have on the subject."<sup>98</sup> Of course, he continues, we would gladly consult the writings of the great Greek architects, but "after the loss of so many excellent authors . . . we have to be content with the observations and conjectures that the Moderns have made on some remains of Antiquity. . . ."<sup>99</sup> The absence of any mention of Vitruvius in this context is most extraordinary and must have been intentional. Since, his argument goes, there is no knowing what ancient architects had to say about their own works, the study of the opinions of modern authors is the next best substitute. The comparison, which he is going to undertake in his book, will be between the proportions applied by these modern architects and those of the ancient buildings. Those laid down by Vitruvius, however, have not the same value for him because, as he says a few pages later on, Vitruvius did not conform to the style as practiced by his contemporaries and for that reason his rules should not prevail over examples of faultless beauty.<sup>100</sup> This being the essence of his book, some of his references to Vitruvius—other than the traditional phrases cited above—gain significance.

For instance, when discussing the Doric capital of the Theater of Marcellus, he criticizes those who in the first place took it as a model, but then changed its proportions to agree with the Vitruvian rules. On the other hand, there were those who followed their own imagination in designing a Doric capital. Since these wished to dispense with the Vitruvian rule, it would be wrong to blame them for the same reasons for which the first group had to be blamed, namely for having followed the opinions and the precepts of Vitruvius. But a different criticism is justified. Wishing to avoid copying Vitruvius, they should then have had every reason to imitate the Antique where "this calculated regularity (régularité si comptée) is not to be found."<sup>101</sup> Although the passage

95. Emil Kaufmann, "Die Architekturtheoretiker der französischen Klassik und des Klassizismus," *Rep. f. Kunst.*, XLIV, 1923-1924, p. 228.

96. *Parallèle*, pp. 24 and 20.

97. *Ibid.*, p. 2: ". . . s'il estoit possible remonter jusqu'à la source des Ordres et y puiser les images et les idées toutes pures. . . ."

98. *Ibid.*, p. 4.

99. *Ibid.*, p. 8: "Tellement qu'après la perte de tant d'excellens auteurs qui estoient la source mesme de l'art, où nous pourrions maintenant puiser la pureté de son origine, il faut par nécessité se contenter des observations et des conjectures que les Modernes ont faites sur quelques vestiges de l'antiquité qui

nous servent maintenant de livres et où tous les maîtres . . . ont fait leurs études."

100. *Ibid.*, p. 14: ". . . le texte de cet Auteur (outre qu'il est bien souvent suspect, et lors principalement qu'il n'est pas conforme à la pratique des anciens maîtres ses contemporains) de plus il n'est pas encore juste qu'il prévaille absolument aux exemples tels que celui-ci qui est sans reproche."

101. *Ibid.*, pp. 14f.: "Et il eust été plus raisonnable que ceux qui le donnent pour modèle, eussent eu au moins la discréption de n'y changer rien et le laisser en sa proportion originale. Quant aux autres qui ont formé des dessins à leur fantaisie, on ne peut pas les blâmer d'avoir suivi le sentiment de Vitruve, et se tenir dans les termes qu'il a prescrits, quoy

is an ornate specimen of seventeenth century Baroque style, it is clear that, for Fréart, copying Vitruvius is blameworthy and the Vitruvian regularity is monotonous. Fréart's judgment is outspoken and not to be mistaken: to follow the dry regularity of Vitruvius or, for that matter, the caprices of your own fancy in preference to the organic beauty of an antique work of art is inexcusable.

Fréart, all through the book, is very critical of the "sectateurs de Vitruve" and prefers Palladio and Scamozzi, who through their studies of the Roman monuments "followed a much nobler style and more elegant proportions than those belonging to the school of Vitruvius."<sup>102</sup> He prefers Vignola to Serlio, always intent to follow Vitruvius, whereas Vignola took another path "à la vérité plus noble et le mesme que je tiens ici."<sup>103</sup> His disapproval is mainly directed against Serlio who, by compiling all the most beautiful Italian monuments, should have gained "une haute idée" of the Orders. Instead, he "returned to the school of Vitruvius drawn back to it by the pettiness of his mind."<sup>104</sup>

Coming to details, Fréart criticizes the Ionic base of Vitruvius as "inexcusable," a certain theory as "plus subtile pour le discours que solide pour l'exécution," and condemns outright the Vitruvian Corinthian capital.<sup>105</sup> "Considering the authority of this serious author who ought to be revered by all members of the profession and in order to avoid being named a critic we could," he adds ironically, "choose a more pleasant way and elude the question altogether by following some people who . . . have concluded . . . that the text is corrupt."<sup>106</sup>

In this critical attitude Fréart was greatly influenced by Scamozzi. Reading the *Architettura universale* he must have been struck by Scamozzi's insistence on the overriding authority of the ancient monuments which the Italian already compared to "a sparkling and clear source from which the most perfect ornamental forms could be drawn."<sup>107</sup> Although Scamozzi often refers to Vitruvius as an authority Fréart could also have come across several passages of outspoken criticism of Vitruvius which mark Scamozzi clearly as a man belonging to the seventeenth century.<sup>108</sup> Though Fréart may not have been as original a writer as first appears, and although by rejecting theoretical regularity and uniformity he did not conform to the doctrine of absolutism then arising, yet he was far in advance of the general attitude of his time in being the first French writer who, in his attempt to lead the reader back to the individual works of ancient architecture, relegated Vitruvius to a more modest place.

The Academy pronounced in one of its first meetings, twenty years after the publication of Fréart's book, that "it was agreed by all members to consider [Vitruvius] to be the first and the most learned of all architects and that he must exercise the principal authority amongst them. His doctrine is admirable as a whole and should be adopted without deviation and also be followed in the greater part of its detail."<sup>109</sup> There is no equally general statement on Vitruvius until very much later, on January 16, 1708. It reads ". . . it appears that [Vitruvius'] intention was more to

qu'ils eussent pu s'en dispenser et avec plus de raison imiter l'antique, où cette régularité si comptée ne se trouve point."

It is amusing and significant to see that Evelyn in his translation (*A Parallel of the Antient Architecture with the Modern*, London, 1664, p. 16) must have thought the censure of regularity to be due to a misprint so that he translated: ". . . [they might] with more reason have imitated the Antients where this irregularity is not to be found."

102. *Ibid.*, p. 22.

103. *Ibid.*, p. 24.

104. *Ibid.*, p. 44. Of Philibert Delorme he had a very low opinion "n'estant conforme ny à l'antique ny à Vitruve" (p. 50).

105. *Ibid.* ". . . la base que Vitruve a composée pour son Ionique, laquelle n'est excusable qu'à ceux qui le suivent en tout le reste . . ." (p. 44). ". . . la raison perspective . . . est

plus subtile pour le discours, que solide pour l'exécution . . ." (p. 46).

106. *Ibid.*, p. 74.

107. V. Scamozzi, *L'idea della Architettura universale*, Venice, 1615, II, book VI, ch. 6, p. 16: ". . . opere antichi . . . dalle quali, come da fonti vivi, e chiari scaturiscono tutte le forme de gli ornamenti più perfetti." Fréart not only found this, his main theme, in Scamozzi but also adopted Scamozzi's criticism of Vitruvius' rule of perspective: "Questa in vero è una sottilità di prospettiva, e più tosto discorsiva che da metter in atto" (*ibid.*, ch. 7, p. 22). Compare with note 105 above.

108. *Ibid.*, ch. 5, p. 14, ch. 7, p. 21, ch. 30, p. 139.

109. *Procès-verbal*, February 4, 1672 (1, p. 6): ". . . sa doctrine . . . est admirable en gros et à suivre sans s'en départir, aussy bien que dans la meilleure partie du détail. . . ."

give a taste of the art of architecture to those people who have no idea of it than to give rules which would enable eminent architects to raise their knowledge to the greatest perfection. . . .<sup>110</sup> The contrast between the two pronouncements could hardly have been more striking. Vitruvius, at one time the unquestioned authority, had been reduced in the course of one generation to the role of the expert who writes for an enlightened public. In other words, his book, once the architect's bible, now ranks no higher than an *Essai* written for the layman, a type of book that was to become so common in the course of the eighteenth century.

The wording of the statement of 1672 makes it understandable that a few years later the young Desgodets went to Rome in search of the mysterious nature of proportions. Yet, paradoxically, it was just his book on Roman buildings that hastened the process of revaluation of Vitruvius by sharpening the contradictions between the Vitruvian doctrine and the actual remains of ancient architecture. In this connection the Academy's attitude underwent interesting changes in the intervening years between the two statements. In the beginning one comes across passages in which members incline to uphold a Vitruvian rule even without confirmation by the monuments, whereas from about the time when the Academy considered Desgodets' book the occasions became more and more numerous when Vitruvian rule was rejected in favor of the actual examples of ancient monuments.<sup>111</sup> Of course, explanations for the disparity between Vitruvius' doctrine and reality were offered, one of them to the effect that his rules were really those applied by the Greeks before his time and that his contemporaries, the Roman architects, relaxed the rigidity of his precepts.<sup>112</sup> That was also the opinion expressed by Blondel. But neither he nor the Academy drew any deduction from their supposition, as Fréart had done. When he compared the Doric capital of the Theater of Marcellus with those proposed by Vitruvius and some modern authors, he did not hesitate for a moment, as we have seen, to side with the original and to reject Vitruvius. The Academy discussed the same matter on two occasions. In 1677 they took Vitruvius as a standard and were content to observe that each of the modern authors differed from him in varying degree. In 1681 they still came to the conclusion that the proportions of Vitruvius were "ingénieuses," but on the other hand, did not disapprove the changes which Palladio had made.<sup>113</sup> It was only in 1683 that Blondel accepted fully the point of view upheld by Fréart in 1650. Now he criticizes strongly those modern architects who preferred Vitruvian rules to the beautiful example which they had before their eyes.<sup>114</sup> But on the whole Blondel remained careful in his criticism of Vitruvius and very apologetic when he could not avoid it. "Not in order to diminish in any way the respect which is due to the authority of Vitruvius nor to debase his doctrine" is his postscript to a rejection of a Vitruvian rule.<sup>115</sup>

But not all people were as considerate as Blondel, with his responsibility as Director of the Academy. Some thought that Vitruvius was a "good-natured and simple but half-educated man who told, regardless of relevance, all he knew or even did not know."<sup>116</sup> Perrault himself, through

<sup>110.</sup> *Ibid.*, III, p. 285; "Comme il paroist qu'il s'est plus appliqué à donner du goust pour cet art à ceux qui n'en ont aucune notion qu'à donner des règles qui donnent moyen aux excellens architectes de tendre leur connoissance à plus grande perfection. . . ."

<sup>111.</sup> *Ibid.*, March 11 and May 5, 1675 (I, pp. 93, 97). In 1676 members think the Vitruvian base with round plinth to be correct although no antique examples exist (December 14, I, p. 127). In 1693 the same form is considered to be bad taste, not to be found among the good antique examples (February 23, II, p. 253).

For rejection of Vitruvius see January 12, 1693 (II, p. 251); January 11, 1694 (II, p. 274); October 29, 1696 (II, p. 338); February 25, 1697 (III, p. 4); June 3, 1697 (III, p. 11).

<sup>112.</sup> *Ibid.*, February 20, 1673 (I, p. 21) and May 5, 1675

(I, p. 97).

<sup>113.</sup> *Ibid.*, January 11 and February 8, 1677 (I, pp. 129ff.), and June 9, 1681 (I, p. 315).

<sup>114.</sup> *Cours*, II, p. 42: "Par où l'on peut conoistre que tous ces Architectes modernes n'ont pas voulu s'écartier du sentiment de Vitruve qu'ils ont préféré à ce qu'ils avoient devant les yeux dans ce bel exemple."

<sup>115.</sup> *Ibid.*, p. 62. At about the same time R. Ouvrard, whose work was much valued by Blondel, claimed that the Vitruvian doctrine, based as it was on harmonical proportions, could give architects "des Règles fixes et certaines" (*Architecture harmonique*, Paris, 1679, p. 17).

<sup>116.</sup> Perrault, *Vitruve*, 1684, p. 32 n. 2: "Ceux qui veulent faire passer Vitruve pour un bon homme, demy savant, qui dit, à propos ou non, tout ce qu'il sait, ou qu'il ne sait pas, alléguent. . . ." In the *Préface* he mentions also that the

whom we know of the existence of this shade of opinion, was less biased. This was natural enough in the learned translator of Vitruvius, and it is not surprising to hear him claim that "the precepts of this excellent author . . . are absolutely necessary for the guidance of those who wish to perfect themselves in this art. . . ." <sup>117</sup> But neither was he prejudiced in favor of Vitruvius since he did not think that "by undertaking to explain an author one is bound to make a panegyric or to uphold all he has written." <sup>118</sup> Perrault was considerably less inhibited by Vitruvius than many other authors of the time. For him changes in forms and proportions are due to changed customs and, consequently, he refuses to recognize an absolute norm. This allowed him to accept many of Vitruvius' statements at their face value even if they were in open contradiction to the accepted norm of Roman architecture. He personally valued Vitruvius mainly as an authority on rules which, by reflecting the more primitive art of the Greeks, could easily be memorized. The method which he proposes in his *Ordonnance* in order to arrive at generally acceptable proportions is, according to him, the one Vitruvius had used and whose "divisions méthodiques" he contrasts to the "mesures irrégulières" to be found in works of the Antique. <sup>119</sup> Another time he praises the "régularité des divisions non rompues sans raison" and adds that they should be easy and convenient like those of Vitruvius. <sup>120</sup>

Vitruvius is for Perrault only one of the many writers on architectural theory who failed to have their rules sanctioned by universal approval; it even seems that he relegated him to a place inferior to that of Palladio who was included in his list of aspirants to the honor of architectural lawgiver. <sup>121</sup> He considered Vitruvius to have been a man more of doctrine than of genius and believed that his main qualification, the possession of expert knowledge of antiquity, caused him to be so exacting that people had no wish to imitate him. <sup>122</sup>

The difference between the antique monuments and the Vitruvian rules became increasingly apparent. Each time this happened the scales were tipped in favor of the real, not the Vitruvian tradition. Daviler contrasts the first phase of the Renaissance when architects followed Vitruvius blindly and found themselves "constrained by his rules which they did not dare to abandon," with the later period when men with deeper insight "meditated on the difference existing between these rules and the ancient buildings" and, discovering beauty and harmony in these monuments, believed that they could make use of the Vitruvian rules in a freer and more independent manner. <sup>123</sup>

This development of an increasingly detached and sometimes critical attitude towards Vitruvius forms the background to the lack of references to Vitruvius in Desgodets' *Traité*. He mentions him on exactly three occasions, each time in a negative way: when he abstains from recapitulating the stories of the origin of Orders "which have been described at full length in Vitruvius from whom the modern authors have taken what they have written about it"; when he reports that he did not find any example of the Tuscan Order amongst the ancient buildings while "the description which [Vitruvius] gives of it is very obscure"; and when Vitruvius' assertion that the Doric column had

"grande obscurité de langage, et la difficulté des matières . . . l'a rendu si impénétrable, que plusieurs l'ont jugé tout-à-fait inutile aux Architètes."

<sup>117</sup> *Ibid.*, Préface.

<sup>118</sup> *Loc.cit.* "Car bien loin d'approuver la modestie de ceux qui n'ont osé toucher au texte de Vitruve par le respect qu'ils ont eu pour ses Copistes au préjudice de la vérité; la grande vénération que j'ay pour l'Auteur même, m'a porté à déclarer mes sentimens sur ses pensées . . . car je ne crois pas que quand on entreprend d'expliquer un Auteur, on s'engage à faire son panégyrique, ny à soutenir tout ce qu'il a écrit."

<sup>119</sup> *Ordonnance*, pp. xvii.

<sup>120</sup> *Ibid.*, p. xxiii.

<sup>121</sup> *Ibid.*, p. xx.

<sup>122</sup> *Vitruve*, p. 55, n. 2.

<sup>123</sup> *Cours*, Preface. This at least seems to me the only possible interpretation of an otherwise contradictory text. "On eut recours aux écrits de Vitruve qui est le seul des Anciens dont

il nous reste des préceptes de cet Art; ceux qui suivirent sa doctrine imitèrent jusques à ses défauts, persuadé que la lumière du siècle où il avoit vécu estoit le flambeau le plus assuré pour les conduire. L'Architecture alors se trouva contrainte par ses règles d'où ils n'osoient sortir, de sorte que s'ils y mêloient quelques petits ornements, ils tenoient encore du mauvais goût et de la manière Gothique. Mais des esprits plus pénétrants firent réflexion à la différence qu'il y avoit entre ces préceptes et les bastimens anciens dont ils admireroient les moindres restes; le Dessein dont les Arts ne sont que la production, leur en fit connoître les beautés, et enfin ils en mesurèrent les parties, et surpris de l'harmonie qu'elles avoient entre elles, ils crurent avec raison qu'il se falloit servir des préceptes de Vitruve, comme d'un grand Maître de l'Art en ce qui regarde la construction des anciens Édifices pour en suivre les proportions et pour donner à leurs Bastimens une forme aussi agréable que régulière."

no base is rejected by him "because the Doric Order would be mutilated if the base were to be cut off the column."<sup>124</sup> Perhaps of still greater significance are passages in which he fails to mention him altogether. This is most striking when he recounts how he arrived at his design for a Doric Order. In the first place, he says, he took from the antique buildings those parts in which they excelled; in this selection he followed "les maîtres de l'art" and what they had approved most; finally, when the antique failed to provide him with parts which are necessary for a beautiful composition, then he had recourse to what seemed to him best in the works of modern architecture. There is no reference to Vitruvius at all.<sup>125</sup>

The significance of Desgodets' almost complete neglect of Vitruvius is not lessened by the fact that no other names, either of architects or of authors, are cited by him, whether to give more weight to his own opinion or whether to refute one differing from his own. It only means a reluctance to cite particular sources since he fully acknowledged the debt he owed to monuments, antique and modern, and to modern theory as a whole. He preferred to present his book as embodying solely the results of his own deliberations on the subject as the great Italian writers before him had done. In that he is quite exceptional. All the French theoretical writers referred frequently to monuments and authors, either from the desire to parade their erudition or from the more modest wish to give their own views an authoritative backing.

#### Two Problems of Classical Theory

The rest of the treatise, apart from special chapters on architectural parts, such as pediments, doors, windows, niches, and balustrades, is mainly concerned with problems arising from the application of the Orders to actual buildings. Modern architecture offered much less opportunity to employ a system of isolated columns as the formative element of a building than had been the case in classical times. The multi-storied monumental building being now the normal type, the application of superimposed Orders became more frequent. This system involved two vital axioms of the classical doctrine: that the part which carries must appear to be stronger than the part carried and that no part should overhang with nothing to support it, the sin of the *porte-à-faux*. The French school of the seventeenth century perceived fully the complications inherent in the system of superimposed Orders and fixed its attention, as in so many other cases, on the task of regulating into well-ordered channels what so far had perhaps been dealt with in a rather haphazard manner. The ancient Roman architects solved the problem in their usual empirical way and Italian theory, if not practice, followed Vitruvius, who, in a passage much criticized by the French school of architectural theory,<sup>126</sup> recommended the reduction of the upper Order by one quarter of the lower one. This, obviously, would have made the upper Order disproportionately low though, on the other hand, it would have had the gratifying effect that no part would have been extruding far enough to court the danger of a *porte-à-faux*.

Already Serlio had outlined some of the possible solutions. But he, as all the other authors of the sixteenth century, still adhered to the unrealistic proportions of Vitruvius.<sup>127</sup> François Blondel

124. *Traité*, Bibl. Institut, pp. 10, 12, 28. Twenty years later when he remodeled his *Traité* he added a few references, most of them of a critical nature (MS, London RIBA, pp. 81, 145, 179, 244). Strangely enough, he reversed completely his criticism of Vitruvius' Tuscan Order. Originally it read: "L'autorité de Vitruve fait seulement connoître que [l'Ordre Tuscan] étoit reçu de son temps au nombre des Ordres d'Architecture quoique la description qu'il en donne soit fort obscure." It now reads: "L'autorité de Vitruve est suffisante pour faire connoître, que cet ordre étoit de son temps au nombre des Ordres d'Architecture et il donne assez précisément les proportions." (MS Institut, Ch. III and RIBA, p. 35.)

125. *Ibid.*, p. 22: "... édifices antiques . . . sur lesquels

je me suis réglé pour les proportions . . . non pas que j'en aye suivi aucun précisément, mais j'aye observé ce qu'il y a de plus beau dans chacun des monumens que j'en aye vus et j'en aye composé un ordre suivant ce que les maîtres de l'art en approuvent le plus, et même où l'antique ne m'a pas fourni les parties qui estoient nécessaires pour faire une belle composition je me suis servi de ce qui m'a paru convenable dans les ouvrages des architectes modernes."

126. Vitruvius v. 1 and *Procès-verbal*, April 13, 1676, April 21, 1681 (I, pp. 115, 310); May 21, 1691, January 5, 1693, October 3, 1695 (II, pp. 215, 251, 312); August 12, 1697 (III, p. 16).

127. Serlio, ed. 1663, IV, p. 346.

was the first to deal with the problem systematically, reviewing rules given by previous writers in all their implications.<sup>128</sup> He did not yet make an unequivocal decision among the various possible solutions but seemed to incline to the one given by Scamozzi, which at about the same time became the accepted rule.<sup>129</sup> Scamozzi's solution to make the width of the upper column the same as the top of the lower column appealed to French writers for various reasons. In the first place it brought the reduction in height down from the Vitruvian quarter to approximately one-sixth, which was aesthetically much more satisfactory. Furthermore it interlocked the whole structure of superimposed Orders by making all its members to be finally dependent on one measurement, the diameter of the lower column. The resulting integration into an organic unit must have been considered a decisive gain by the classically trained mind and the unavoidable restriction in freedom of choice regarding proportions a not too exacting price to pay. The gradually diminishing Orders where upper and lower diameter are brought into close relationship were likened by Scamozzi (who followed a Vitruvian idea of some consequence) to tall trees cut up into several sections.<sup>130</sup> This rationalistic explanation linking the art of architecture with a work of nature must have been the final reason for the acceptance of Scamozzi's rule by French architects. It was now possible to lay down for good all the more doubtful measurements, and very few points were left open for discussion. As far as I can see, after Blondel's noncommittal discussion Desgodets was the first to reproduce in word and drawing the Academy's rules of superimposed Orders. It is a sign of general satisfaction with the solution of this problem that Desgodets, when re-editing his treatise, took this chapter over almost without alteration.

This was not quite the case with another problem with which the French school of architectural thought grappled for a long time: the inconsistencies resulting from the clash of the conflicting forms of round column and rectangular pilaster. The French writers were not concerned, at least not during the seventeenth century, with the wider aesthetic implications of the problem, but wholly with avoiding discrepancies and mitigating obvious irregularities. The pilaster, because it is not normally diminished, is wider and also deeper in its upper section than the column of which diminution is the salient and invariable feature. As soon as column and pilaster are placed in alignment, difficulties arise in placing the entablature correctly; that is to say, in such a way that the face of the architrave is in line with the face of the upper part of the column or pilaster. There were three main ways to overcome the difficulty. One was to diminish the pilaster in the same way as the column. There were antique precedents for this and it was also accepted by the Italian architects of the sixteenth century in practice and in theory. The French school of the second half of the seventeenth century objected to it more and more on the ground that it was against the nature of the pilaster to imitate the lines of the round column, in addition to the fact that the edges of the pilaster would unpleasantly exaggerate and distort the graceful curvature of the column. The second solution was not to diminish the pilaster but to make a projection in the entablature, thus letting it follow, as it were, the deeper outline of the pilaster. In that way the entablature again could be in line with the face both of the pilaster and of the column. This, of course, had been done frequently not only in the antique but on an increasing scale during the development of the Mannerist and Baroque styles. The leaning towards classic restraint made French architects strongly oppose this solution. The third answer to the problem was to permit the entablature to be in line with only one of the members, either column or pilaster. This was disliked by the French school because the entablature then showed either a too pronounced recess over the pilaster or, much worse, a *porte-à-faux* over the column.

In this predicament neither Vitruvius, who did not deal with the problem, nor antique build-

128. *Cours*, III, Books 2 and 3.

129. *Architettura*, VI, Chapt. 11, p. 37.

130. Vitruvius v. 1.

ings, which used all three solutions indiscriminately, could have been of any help "so that nothing can be decided from all these different examples," Desgodets complained.<sup>131</sup>

The Academy held continuous discussions during 1672 and 1673 and decided finally to adjourn a decision in "cette grande question,"<sup>132</sup> Again and again over the next twenty-five years the Academicians revert to this problem. The minutes of their meetings make it evident that they considered this problem not just as a point of great nicety but that it bewildered them because they felt themselves to be confronted with a fundamental inconsistency in the system of classical architecture. Gradually a solution emerged until, in 1700, the Academy took the unusual step of having their deliberations confirmed by the *Surintendant* at a special sitting.<sup>133</sup> But even thereafter the quest went on, the problem being brought up again and again.

The method recommended by the Academy to circumvent all the inherent difficulties was to diminish the pilaster by a half or a third of the diminution of the column and to place the entablature in such a way that the effect of the remaining difference in diminution between column and pilaster was "split," that is to say, the entablature was carried slightly *porte-à-faux* over the column and slightly recessed over the pilaster. In short, the purpose of this solution was to make the contradictions as imperceptible as possible, a solution which was in perfect harmony with the general trend of French architecture around 1700.

In this instance the rules prescribed by Desgodets do not exactly correspond to the Academy's recommendations. The argument centered around the question whether pilasters should, in certain cases, be diminished and, if so, to what degree. Desgodets was, of course, fully conversant with the Academy's arguments, as is evident through a reference to these discussions in the *Édifices*.<sup>134</sup> He, too, advises diminution in certain cases. Yet he overcomes the aesthetic objections against a fully diminished pilaster and accepts this "unnatural" form rather than let irregularities pass even if minimized in their effect by the Academy's stratagem. He therefore recommends giving the pilaster in these cases the same diminution as that usual for the column. Not only did he disagree here with the Academy, but his theory developed in an opposite direction from the one observed by the Academy. When he remodeled his manuscript he made only a few changes in this chapter. However, the sentence written at the beginning of the century, "The nature of the pilasters demands that they be as wide at the top as at the bottom . . . though there are several cases where it seems to be necessary to diminish them," read later, "The pilasters can be as wide at the top as at the bottom and they can be diminished at the top in the same way as the column."<sup>135</sup> At both periods he is for full diminution, but whereas in the early manuscript he admits the unavoidable necessity for diminution, later on he states it as an equally admissible form. At the same time the Academy moved from the constructive proposal of 1700 with its recommendation of partial diminution to a rather defeatist attitude in 1734 where it was thought "that one should on all occasions avoid the diminution and do without pilasters rather than give them diminution."<sup>136</sup> This may have been due to members falling for a short period under the influence of radical sentiments against

131. *Traité*, Bibl. Institut, p. 82: "... en sorte que l'on ne peut rien décider de tous ces exemples différents."

132. *Procès-verb.*, January 23, 1673 (I, p. 19), cf. Blomfield, *French Architecture*, I, pp. 15f.

133. *Ibid.*, August 2 and November 29, 1700 (III, pp. 103, 116).

134. *Op.cit.*, p. 144.

135. *Traité*, Bibl. Institut, p. 82: "La nature des pilastres demande qu'ils soient aussi large par le haut que par le bas . . . cependant il se trouve plusieurs cas où il semble qu'il soit nécessaire de les diminuer." MS, RIBA, p. 174: "Les pilastres peuvent être aussi larges par le haut, que par le bas, et ils peuvent être diminués par le haut comme les Colonnes; il y a des exemples dans l'Antique d'une égale beauté de chacune de

ces manières; cependant il semble qu'il seroit plus régulier de les diminuer par le haut . . ." (the manuscript in the Bibl. Nat. states more definitely: "ils seroient plus régulier d'être diminués par le haut").

136. *Procès-verb.*, June 21, 1734 (V, p. 148). Diminution in width was already condemned a few years earlier (V, p. 10) whereas Desgodets states categorically "... lorsque l'on diminuera les pilastres . . . ils doivent être sur toute leurs faces . . ." (MS, RIBA, p. 197). An insufficient diminution of the pilaster in width produces more irregularities, additional to those caused by diminution in depth, especially in the Doric Order, as well as incongruities between the capital of the column and that of the pilaster. These difficulties too must have influenced Desgodets to side with full diminution.

pilasters, as for instance those expressed by Cordemoy, because a few years later they revert to their original decision.<sup>137</sup> Yet, even so, the Academy's disinclination to treat column and pilaster as aesthetically equal partners foreshadowed the principles of Neoclassicism, whereas Desgodets' unimpeded preference for diminution was still rooted in the seventeenth century.

#### Desgodets' Book on Types of Buildings

Whereas Desgodets took over from the early manuscript many chapters without basic alterations, he enlarged considerably on a chapter called "La manière de placer régulièrement les Colonnes et les Pilastres aux Édifices," which in its revised form shows Desgodets in his capacity as teacher. It still contains, of course, purely academic teaching, in accordance with the purpose of the book, but the problems are now less superficially examined. A tendency to enliven pure theory with practical problems is noticeable in another chapter on the proportions of statues, illustrated by a design for a building which, with its double-storied portico of isolated Doric and Ionic columns, some of them coupled, carrying an horizontal entablature with an Attic Order set back according to rule, has no connection with the actual style of the period (Fig. 8). Yet it may be of some interest as a specimen of the designs with which the young generation of the 1720's, through attending Desgodets' public lectures, became familiar. It is quite possible, that one of them was Jacques-Ange Gabriel, the future architect of the École Militaire and its double-storied porticos.

After Desgodets had completed the first cycle of his academic course he added a special chapter on "Taste," in which he adopted the Academy's question-begging definition of works of good taste as those which had pleased enlightened people at all times and which were made pleasing through the application of the proportions.<sup>138</sup> Following from this interpretation, Desgodets professes, like most Academicians, to a belief that the rules governing architecture "are not as it were arbitrary, they are almost positive" thereby taking sides against Perrault's provocative principles of beauty and proportions. Desgodets must have had this doctrine in mind again when he gives the warning that the beauty of a building does not consist "in precious materials . . . as gold, silver, bronze, marble, nor in a mass of confusing ornaments, but in the application of rules and regular proportions. . . ."<sup>139</sup> But, perhaps he was aiming at the same time at a tendency which had become manifest more recently in interior decoration. He refers specifically to it when he demands that in the interior as well as in the exterior of a building "the architrave must always dominate and be more apparent than the sculptured ornaments" and "that one must not employ Gothic moldings under the pretext of new inventions."<sup>140</sup> Still more explicit is his reference to this gap between architecture and interior decoration which was to widen to an extraordinary degree when the Rococo came into full bloom. As far as I can see it is the earliest allusion to this historically remarkable phenomenon and it may therefore be appropriate to quote the passage in full: "In all parts which accompany the Orders of architecture such as impost, archivolt, bands, door and window frames, vaulting, plinths, frames, panels and others, no moldings are to be used other than those which have been drawn in the first three designs of the first chapter and it would be bad taste to make use of the other moldings which have been introduced into the works of joinery."<sup>141</sup>

At the end of 1722 Desgodets announced his intention to give, in the following year, lectures

137. *Procès-verbal*, March 3, 1738 (v, p. 228).

138. *Ibid.*, January 7, 1672 (i, p. 4) and May 30, 1712 (iv, p. 10). This is Desgodets' definition: "Le bon goût d'Architecture est une convenance proportionnée du tout avec ses parties, et de toutes les parties entre-elles, et avec leur tout qui plaît dans tous les tems sans variation" (MS, RIBA, p. 295).

139. MS, RIBA, pp. 297, 299.

140. *Ibid.*, p. 302: "Aux décorations du dedans et du dehors des édifices, l'architrave doit toujours maîtriser et être plus

apparente que les Ornemens de Sculpture, ces ornemens doivent . . . n'être point confus entr-eux, être séparé par des spaces lis . . . et faites pour décorer l'Architecture, et non pour primer. . . . Il se faut toujours servir des moulures ordinaires et usitées dans tous les tems et n'y pas employer des moulures Gothiques sous prétexte de Nouvelle Invention." Desgodets uses the term "Gothic" to denote *bizarre* or *capricieux*, a meaning which was quite common at the time.

141. *Ibid.*, p. 172.

on the "distribution and proportions of churches and other buildings."<sup>142</sup> Subsequently he read from time to time to the assembled Academy chapters from his new treatise.<sup>143</sup> Mlle. Duportal pointed out rightly that "in it we gain for the first time an idea of the teaching of architecture at the Academy."<sup>144</sup> Whereas the first volume conformed on the whole to the pattern laid down in Italian theory of the Renaissance, for the second volume no prototype existed. The concept of making a systematic collection of various types of buildings each represented by one example and each, though not a reproduction of an actual building, fully worked out and described in all its functions, was undoubtedly original. But even so, godfathers to this were Palladio and Vitruvius. The Academy, while reading Palladio in 1700, came across his classification of ancient temples in which, as it was remarked, he followed Vitruvius. Reflecting presumably on the futility of this classification for modern times "it caused the Company to discuss the way of constructing our churches according to their different functions, as for instance those which serve as cathedrals, parochial or monastic churches, or as private chapels."<sup>145</sup> No more was heard of it, but with Desgodets this stimulating discussion must have remained present and must have been the ultimate cause for his plan to collect into one volume not only churches but every type of building known to his time, such as the Hospital, the Hôtel de Ville, the Palais de Justice, the Palaces and the private houses. In the part treating religious buildings, he uses the identical terms mentioned by the Academy almost twenty-five years earlier.

But in the meantime Desgodets had advanced in age and it seems that, at least for the part dealing with churches, another and more personal motive may have prompted him. It is evident through several passages that Desgodets was, or had become with increasing age, a devout man. "Amongst all buildings" he exclaims, "which architecture can produce there is nothing which could or should be compared to churches where the Holy of Holies, the Word Incarnate, the Creator of nature actually lives in order to receive there the homage and adoration of man . . . [therefore] how much care must the architect exercise who undertakes the drawings . . . of a church which is verily the House of God so that he observes everything which the *bienséance* and the respect due to the Holiness of a sacred building demands of his art."<sup>146</sup> Even more striking than this admonition, unusual in its tenor for the period, are the occasional uncalled-for digressions, proving clearly that Desgodets was influenced by thoughts of religion, how deeply felt it is unnecessary here to decide. While describing in a matter-of-fact way the altar of the parochial church he mentions that it displays the second coming of Christ, which, he thinks necessary to add, "is terrible for the bad and consoling for the good, a sight which should be perpetually in one's thought"; or, explaining that in a convent a church separate from the nuns' chapel must be provided for a priest to celebrate "the holy sacrifice of Mass, which," he does not fail to interject, "is the greatest act of the Christian religion, the most agreeable to God and the most useful to the congregation."<sup>147</sup>

In this frame of mind he set out to develop the various types of churches. Naturally enough he tried to go as far back as possible in the search for the ultimate roots and thus arrived at the early Christian churches. He chose them, of course, not only, as he avows, as those nearest to the Apostles but certainly too because they were nearest to antiquity. He mentions the Roman

142. *Procès-verb.*, December 1, 1722 (iv, p. 254).

143. He reads preface and first chapter on November 18, 1726 (iv, p. 332), presents plan for *Hôtel Dieu* on April 21, 1727 (v, p. 5), reads second chapter on November 17, 1727 (v, p. 16) and the third chapter on May 10, 1728 (v, p. 26), showing also plan of *Parlement*. The second volume is headed: *Traité de la commodité de l'architecture, concernant la distribution et les Proportions des Édifices . . .*"

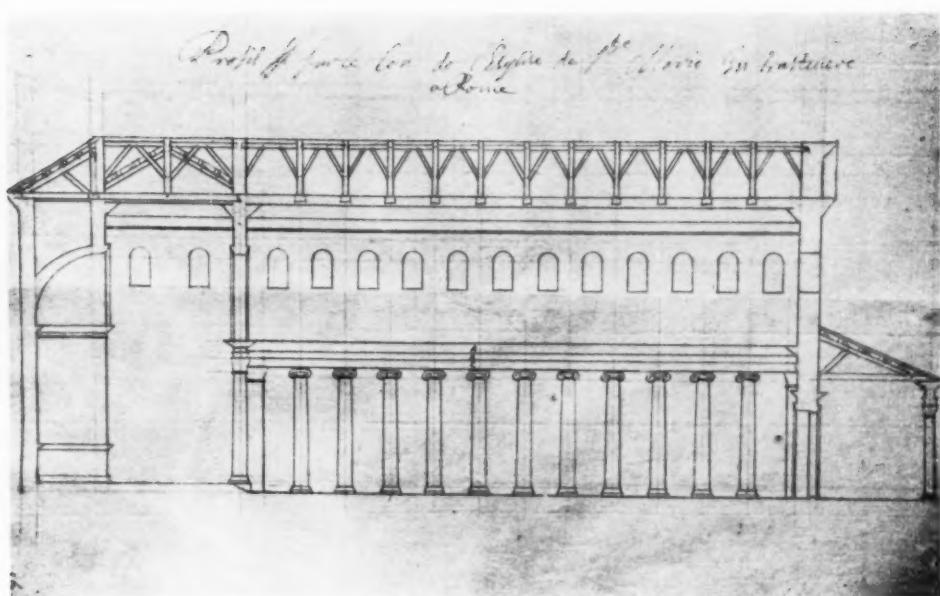
144. *Op.cit.*, p. 157. It is stated on the title page of the manuscript: "Receuilie par Jean Pinard Élève et Étudiant de

la d. Accadémie Royale d'Architecture." Mlle Duportal thinks that Pinard must have died soon after having received the first prize in 1723 since he is not mentioned as *pensionnaire* in Rome. However, at that period the winning of a prize did not confer automatically the privilege of being sent to Rome (see *Procès-verb.*, iv, p. xvii, and Arch. Nat. o<sup>1</sup> 1083, fol. 32).

145. *Procès-verb.*, July 5, 1700 (III, p. 100).

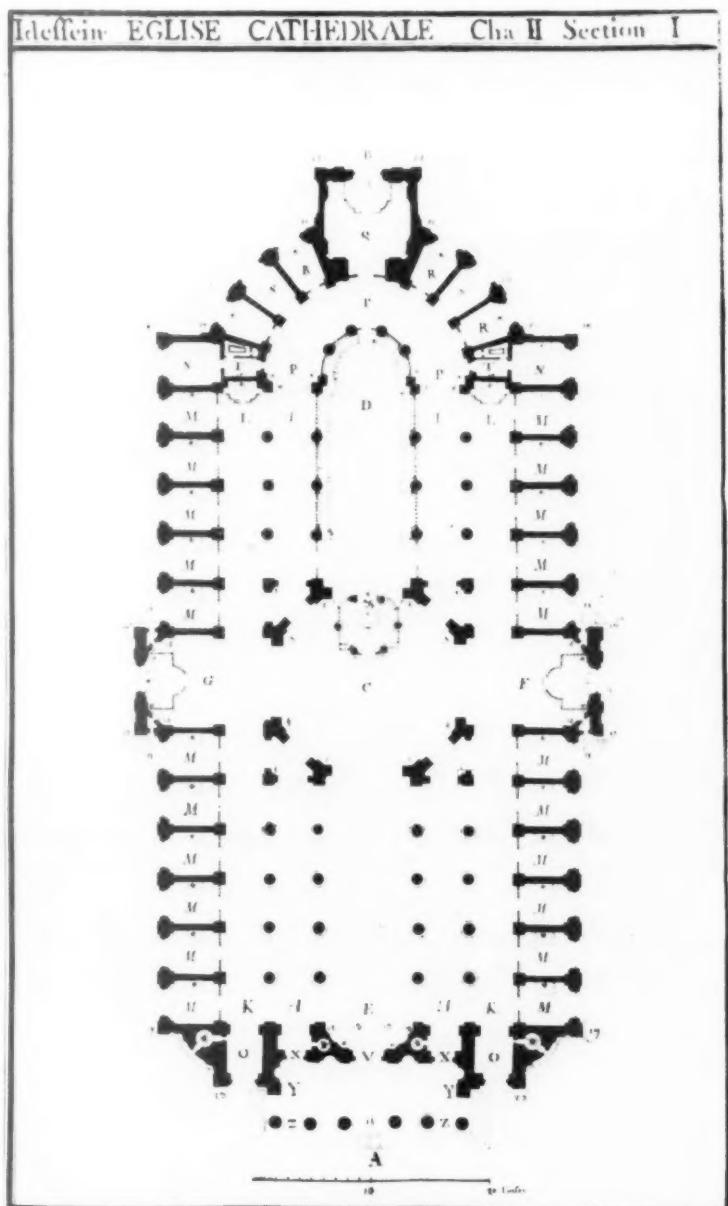
146. MS, Bibl. Nat., II, p. 8.

147. *Ibid.*, pp. 184, 220.

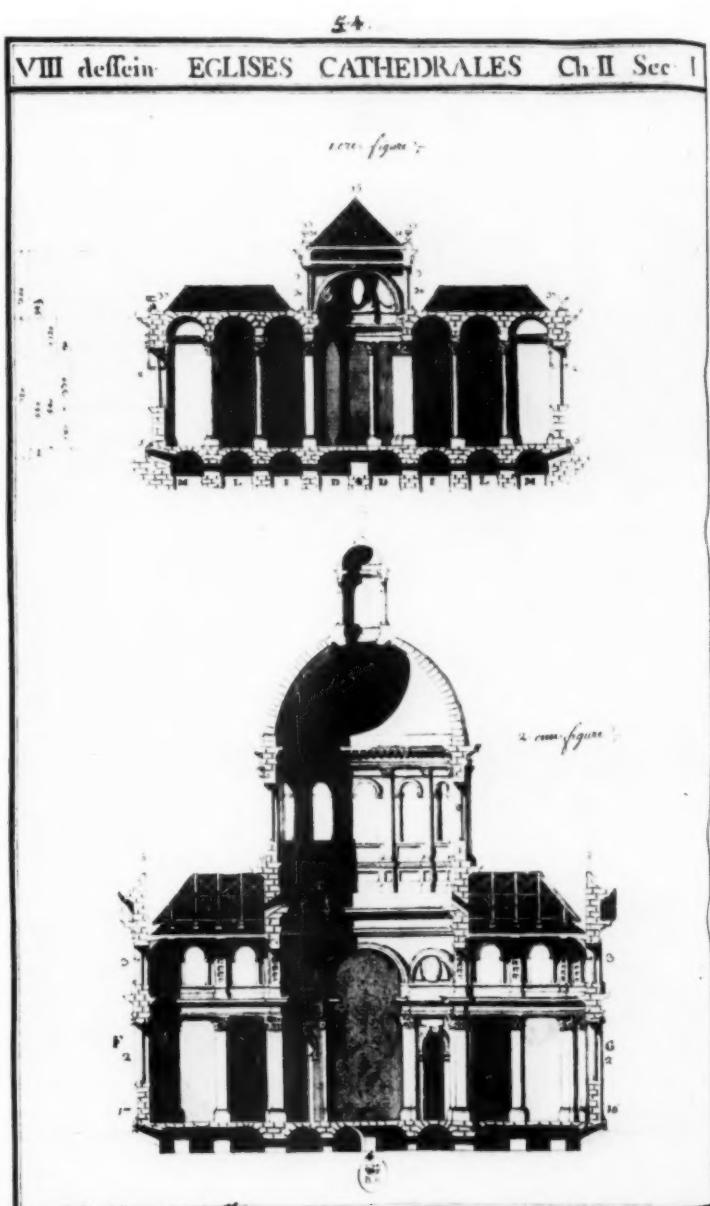


9. Rome, Santa Maria in Trastevere, longitudinal section  
(From Desgodets' sketch book). Paris, Bibl. de l'Institut

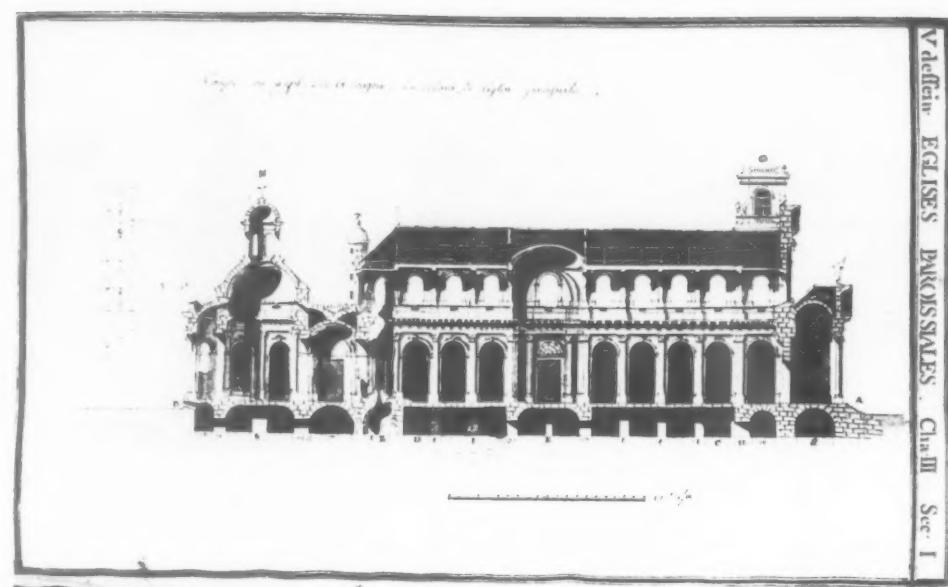
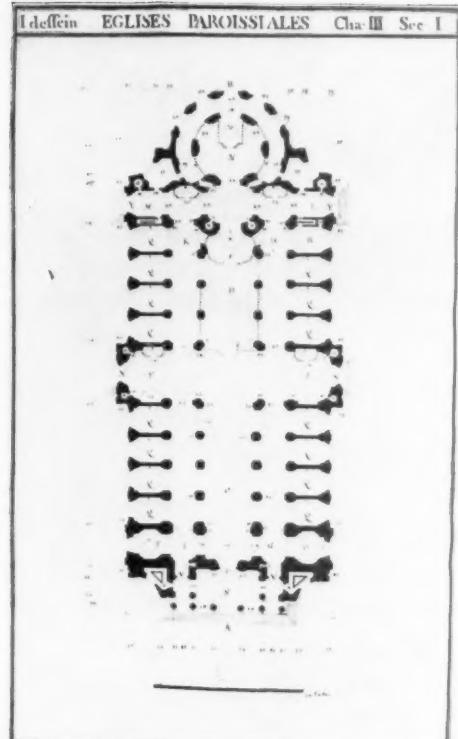
8. Peristyle with Statues (From Desgodets, *Traité des Ordres de l'Architecture*). Paris, Bibl. Nat., Cab. des Estampes



10. Cathedral, plan (From Desgodets, *Traité des Ordres de l'Architecture*)  
Paris, Bibl. Nat., Cab. des Estampes



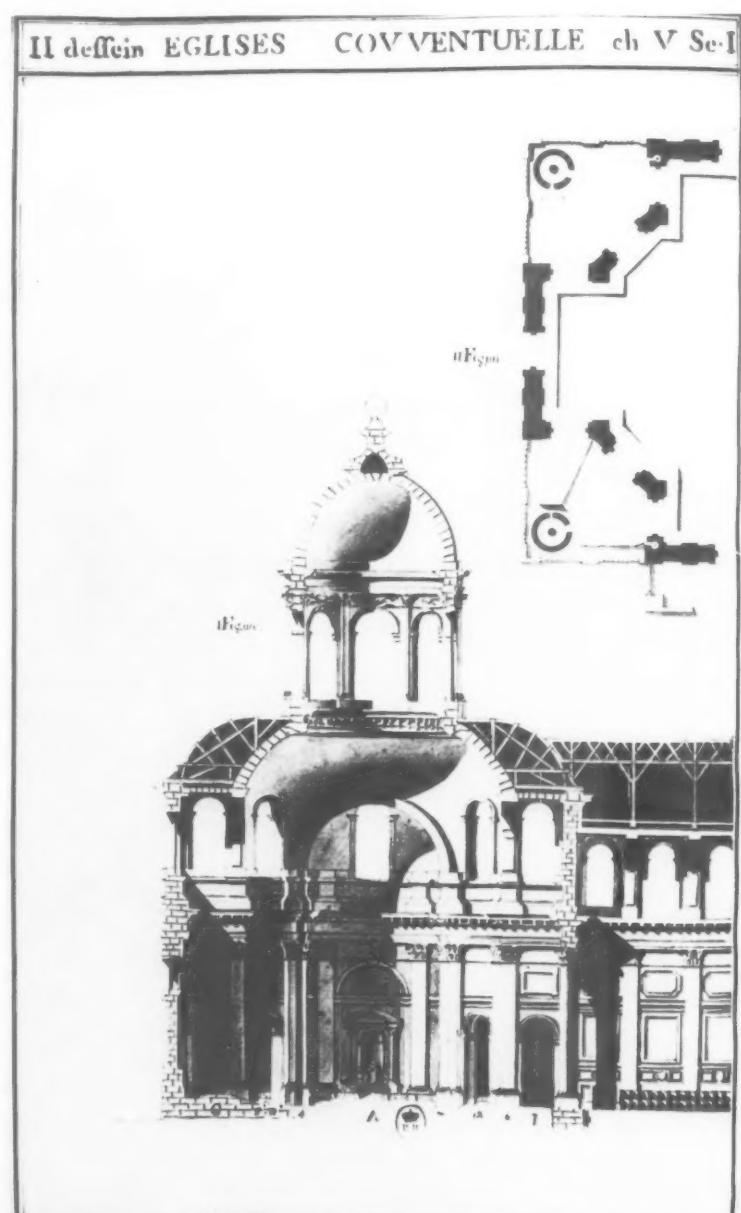
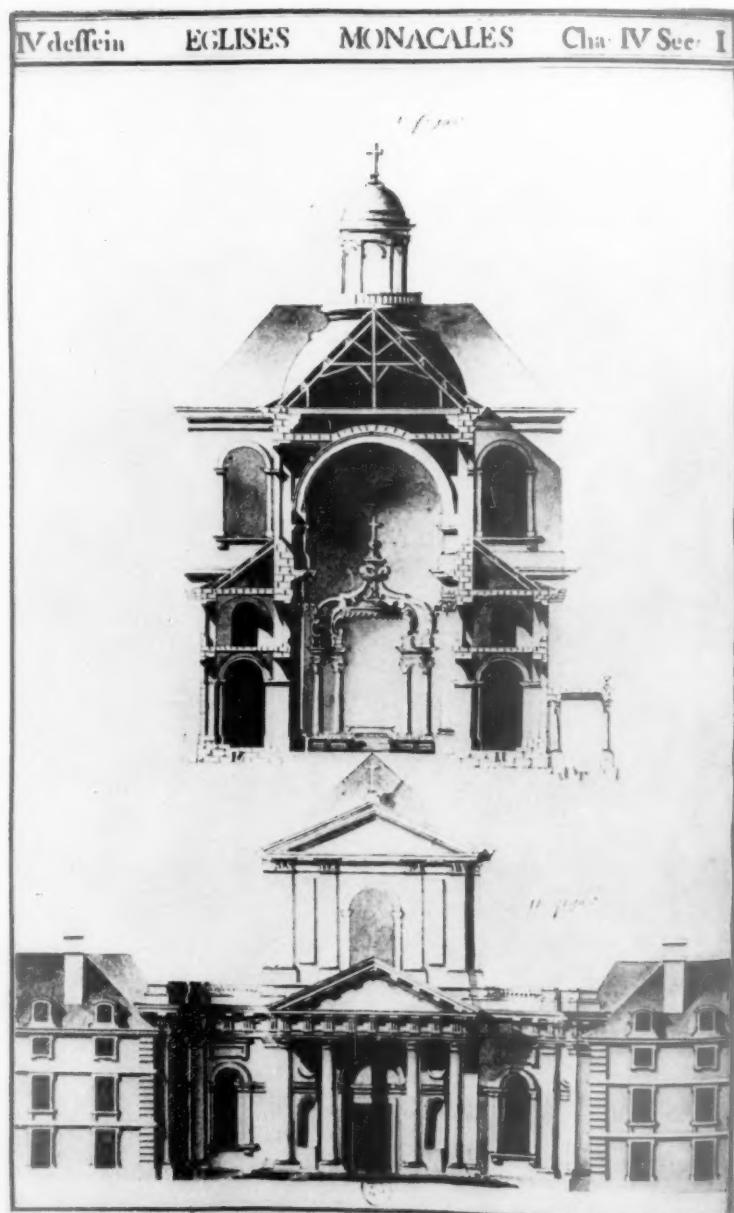
11. Cathedral, two cross sections (From Desgodets, *Traité des Ordres de l'Architecture*). Paris, Bibl. Nat., Cab. des Estampes



12. Parochial church, plan

13. Parochial church, longitudinal section

12-13. From Desgodets, *Traité des Ordres de l'Architecture*. Paris, Bibl. Nat., Cab. des Estampes



14. Monastic church, section and front elevation (From Desgodets, *Traité des Ordres de l'Architecture*). Paris, Bibl. Nat., Cab. des Estampes

15. Church for a Convent, section (From Desgodets, *Traité des Ordres de l'Architecture*). Paris, Bibl. Nat., Cab. des Estampes

basilicas of Santa Sabina, Sant' Alessio, Santa Maria in Trastevere and San Paolo fuori le mura, the first three of which he had studied while he was in Rome and had included in his sketchbook (Fig. 9).<sup>148</sup> He tried to extract from these buildings, if possible, principles which he could follow in his designs for modern churches, and chose Santa Sabina for a description in greater detail. On the whole the principles which he then mentions are of necessity of a rather general nature and not really applicable to the higher organism of a modern church. But we shall find one or two unusual features in his first design, a cathedral, which no doubt were suggested to him by the early Christian basilicas.

This first design is distinguished from those following by being obviously akin to an ideal conception of a cathedral though planned in great detail. That was natural enough since there had not been an occasion to build a monumental church for nearly a generation. The ideal character can be adduced from the rather general way in which the functions of the cathedral are described, general at least in comparison with the detailed description of those of the other churches, and even more from the smooth divisibility of its proportions.

For Desgodets, the eminent expert in the five Orders, the proportions play a prominent part in this as in every other design. The whole building is carefully laid out (Fig. 10). The twentieth part of the whole length serves as a first unit, two of which are given to the nave and the transept, and one each to the aisles, the side chapels, the main entrance and the altar niches at the end of the transept. The fifth part of this unit gives the diameter of the columns. In analogy to the module of the architectural Order this full diameter or its half becomes now the formative element in the design. Every part is based on it, from larger dimensions such as the overall width, the length of the row of chapels or the exterior width of the transepts down to the intercolumniation, the size of the pillars carrying the dome, the dimensions of the Lady's Chapel and even the thickness of the walls. The dome with its drum and lantern, capitals, entablature and arches, as well as the columns carrying the organ or the baldachin over the altar have all the same module—in short the size of every part in this church has as a common denominator the hundredth part of its length.

Some of the proportions such as the length of the building being double its width, the width of the aisles being half that of the nave, and the height of the nave being double its width, Desgodets had discovered in the Roman basilicas and had stated them to be important principles. But, in fact, they were commonly used in the design of churches during this period.

Of course, as Desgodets pointed out, the real dimensions were left open, but he indicated the scale which he had in mind for the building by mentioning 84 *toises* for its length. Now this makes it a church of considerable size, being a third bigger than the then largest modern church in Paris, Saint-Sulpice, and exceeding in length both Notre-Dame and the cathedral of Amiens.<sup>149</sup> The height of the dome would have been more or less equal to the Dôme-des-Invalides. Obviously, a construction of a building of this size was not feasible at the time. Yet, although in this respect the design could be dismissed as an academic though thorough exercise, it contains features which must have had some influence on the future development of French church building.

Naturally, Desgodets wanted this cathedral to excel all others in magnificence. Sheer size was one way to achieve this. But beyond that, Desgodets must have wished to symbolize its perfection also by other means. Rows of tall Corinthian columns carrying a straight entablature, with which he filled the vast inner space, must have evoked the desired impression of exceptional solemnity to eyes accustomed to the normal feature of arches resting on a "wall" of heavy square pillars.<sup>150</sup> It was an

148. Bibl. Institut, MS 2718, fol. 42-45 (cf. Lemonnier, *Revue archéologique*, 1917).

149. The proportions of the nave in Desgodets' design (14.6 m : 19.25 m) almost agree with those of Saint-Sulpice

(15 m : 30 m). The length of the nave would have exceeded Notre-Dame by one-quarter and Amiens by one-eighth.

150. Unfortunately, the longitudinal section of the Cathedral (pl. ix) is missing from the manuscript.

arrangement most unusual for the time and preceded only by the chapels of Versailles and Lunéville, rather special cases of a completely different character. There can be little doubt that Desgodets, wishing to make a deep impression by a unique touch of magnificence, adopted what was suggested to him by the churches "nearest to the Apostles." They all employed columns and some, as for instance Santa Maria in Trastevere, Santa Maria Maggiore and San Lorenzo, also a horizontal entablature. For the equally uncommon feature of two aisles flanking the nave, he could take San Paolo fuori le mura as a model. But the imposing arrangement lining up four rows of columns could also have been suggested to him by a building nearer to hand, the Cathedral of Notre-Dame. It was probably also the study of Gothic planning that made him place the crossing almost in the center of the building; again Gothic usage rather than the Palladian solution at Il Redentore made him value the optical effect of four free-standing columns as the termination of the apse (Fig. 11).<sup>151</sup> That Gothic architecture, mainly through the proud examples of the national cathedrals, was consciously adapted by architects of this period, is proved by an almost simultaneous design of a church published by the otherwise almost unknown French architect, Nativelle. "The nave," he explains, "is arranged according to the proportions of the nave of the church of Amiens and the choir that of Beauvais following the common opinion that a church composed of these two parts united in the same place would be without fault."<sup>152</sup>

Here again, it was only towards the middle of the century that serious attempts were made to blend Gothic and classical conceptions of architectural beauty. Yet even now structural and aesthetic lightness, which was to become one of the main demands made by Neoclassicism and which was so forcefully demonstrated in Gothic buildings, was already a quality appreciated by Desgodets. "The interior of churches," he remarks in his chapter on Taste, "should have nothing massive . . . in order to be spacious." Sculpture and painting should serve "pour leur donner un air de délicatesse et de légèreté."<sup>153</sup> In his design for a parochial church he reduced the overall diameter of the pillars, an expedient "ce qui donne aux Piliers un air de légèreté et les rends moins embarrassants sans diminuer leur solidité."<sup>154</sup> Nativelle, who was a more conservative architect than Desgodets disagreed with "la manière de bâtir d'à présent." The new fashion, he thought, moves away from the wise maxims embodied in the massive solidity of St. Peter's in Rome and prefers instead "what is termed vast and spacious."<sup>155</sup>

But the sources and trends which Desgodets thought to be productive for modern church building became effective only after the generation taught by Desgodets had grown up. The impression left by Desgodets' lectures and particularly by his design for a cathedral may have slowly developed in an architect like Contant d'Ivry who, above all others, understood the solemn effect that isolated columns carrying an entablature can achieve, and who employed it first in the Cathedral of Arras and later on a greater scale in his design for the Madeleine.<sup>156</sup>

151. For the survival of this kind of termination in the 17th and 18th centuries see the church of Le Cateau Cambrésis (after 1635) and Saint-Pierre in Douai (1735). P. Parent, *L'Architecture des pays bas méridionaux . . . aux XVI<sup>e</sup>, XVII<sup>e</sup>, et XVIII<sup>e</sup> siècles*, Paris, 1926, pl. XLV and fig. 53.

152. Pierre Nativelle, *Nouveau traité d'Architecture*, Paris, 1729, pl. 59.

153. MS, RIBA, p. 296: "Les Églises doivent . . . dans l'intérieur n'avoir point de massif ni de corps inutile afin d'être spacieuse à proportion de leur grandeur, y entremêler avec les ornemens de sculpture et la peinture à des endroits distingués pour leur donner un air de délicatesse et de légèreté. . . ."

154. MS, Bibl. Nat., II, p. 138.

155. *Op.cit.*, pl. 62: "... mais peut-être trouvera-t-on, selon la manière de bâtir d'à présent, que ce bas côté n'est pas assez découvert de la nef, à cause de la largeur des piliers . . . quoyque l'on soit autorisé (pour la largeur des piliers) par un des plus beaux exemples . . . qui sont ceux de la nef . . .

de St.Pierre de Rome. . . . Il est vray que l'on s'éloigne aujourd'hui de cette manière, comme il paroit par la continuation de l'Église de St.Sulpice, dans laquelle on a écarté les arcades de la nef au delà de leur plein cintre, pour avoir ce qui s'appelle le vaste et la découverte de tous cotez, contre les sages maximes de l'ancienne Église."

156. Also in his church of Condé-sur-Escaut (1755). (See Parent, *op.cit.*, pl. LVI and fig. 53.)

Apart from Pinard, mentioned above (note 144), we have no other record of the names of any pupils of Desgodets. According to Thieme-Becker (article "Desgodets") François Cuvilliés had been Desgodets' pupil during his stay in Paris from 1720 to 1724. Cuvilliés' son names Blondel as his father's teacher and, following this statement, Cuvilliés' biographers believe that it was Jean-François Blondel (1683-1756). Wolfgang Braunfels (*François de Cuvilliés*, Bonn Inaugural-Dissertation, Würzburg, 1938, p. 3, notes 11, 12), even states that this Blondel was a professor at the Academy jointly with Des-

Of course, in other respects Desgodets' cathedral with his row of side chapels and particularly with the salient feature of the central space crowned by a fully developed dome would have had the appearance typical for the period (Fig. 11). The nearest parallel to the great octagon that forms the crossing, with its extended diagonal sides decorated by arches between pilasters, seems to be Sant'Agnese on Piazza Navona. Desgodets knew this building well. While he was in Rome he must have found time to study modern churches and especially their domes. At one time he seemed to have contemplated a book on domes and had already completed some chapters which he submitted together with drawings to the Academy.<sup>157</sup> The minutes mentioned San Pietro, Sant' Andrea della Valle, San Carlo ai Catinari and finally Sant' Agnese. It is possible that three drawings of Sant'Agnese in the Cabinet des Estampes to which Lemonnier first drew attention and drawings of Saint Peter's preserved in the Library of the Musée de Arts Décoratifs are those made by Desgodets in Rome.<sup>158</sup> The Academy criticised the pointed curvature of the dome of Sant'Agnese, the height of which exceeds that of the drum by about a third.<sup>159</sup> In Desgodets' design for a cathedral the height of the dome is very much reduced; in fact it is lower than the height of its drum by about one-eighth. But, of course, there are other differences. The dome of Sant'Agnese, a centrally planned church, rests on four piers of solid masonry; their heaviness is broken up by niches placed in the shorter arms of the octagon, whereas Desgodets had to visualize the bad effect which an abrupt termination of the aisles against the walls of the piers would produce. The solution at which he arrived was to hollow out these piers, thus gaining an almost uninterrupted view from one end of the aisle to the other with small triangular rooms above the main entablature. This solution has a striking resemblance to Wren's ingenious arrangement in Saint Paul's.<sup>160</sup>

The remaining designs, having their roots more firmly in reality than in the idealized design of the cathedral, are less intriguing. However, they fulfill in a competent way their purpose of illustrating a type. For that reason too they follow acknowledged models more closely than the cathedral. Thus, the parochial church is evidently fashioned after Saint-Roch (Figs. 12, 13). It shows the same general arrangement with curved terminations of the transept and a Lady's Chapel surrounded by a circular passage. This part is a close copy of the chapel which J. Hardouin Mansart added to Saint-Roch and which was only recently completed when Desgodets made his design. But as the southern section of Saint-Roch including the façade had not yet been built, Desgodets was free to follow his own imagination, which did not fail him. A deep porch of Ionic columns joined to the main body of the church by concave walls leads into the first bay of the church, which by means of a low ceiling forms a vestibule. From this arrangement springs the wholly original idea of repeating the vestibule in a similar form behind the choir, thus forming a link between the main church and the Lady's Chapel. This passage is formed by a sequence of rooms of various shapes—a square, an octagon and a lozenge—which had become fashionable for the interior arrangements of private hotels at about this time.<sup>161</sup>

The "Église Monacale" is ultimately derived from Il Gesù, but Desgodets probably followed

godets. This confusion with either of the two famous Blondels must also have been at the root of the younger Cuvilliés' statement, which is obviously wrong. It is quite inconceivable that the Elector of Bavaria should have sent his own architect for studies to a young inexperienced French architect who was not even a member of the Academy (elected to the second class in 1748 only). It is much more likely that Cuvilliés studied at the Academy and was indeed Desgodets' pupil. His style, however, is so different from that of Desgodets that this probable relationship lacks any significance.

<sup>157</sup> Procès-verb., August 13 until December 3, 1708 (III, pp. 300-306). Regarding this work, mentioned by Ch. Fr. Le Virloys, *Dictionnaire d'Architecture*, Paris, 1770, I, p. 489;

and Fontenay, *Dictionnaire des artistes*, 1776, see Lemonnier's note on the minutes of the meeting of August 13, 1708. Two years later Desgodets showed the Academy drawings of Saint Peter's in Rome, probably drawn by him (III, p. 334).

<sup>158</sup> *Ibid.*, III, p. 303, and Bibl. de la Musée des Arts Décoratifs, no 56 (13 drawings of Saint Peter's). By the same hand 18 drawings of the Pal. de' Conservatori in Rome (no 55).

<sup>159</sup> *Ibid.*, III, p. 304.

<sup>160</sup> The triangular rooms above the main entablature in Desgodets' design do not communicate into the central space.

<sup>161</sup> Cf. the contemporary Pal. Bourbon (beg. 1722, compl. 1729).

the church of St. Paul in Paris. The façade, however, is again of a less standardized pattern (Fig. 14); it was realized in a similar way some years later in Besançon.<sup>162</sup> For the final church design of the "Église Conventuelle" Desgodets adapted some features from each of the three well-known convent churches: François Mansart's La Visitation, Antoine Lepautre's church of Port-Royal and Ch. Errard's L'Assomption. Again he did not copy slavishly but tried to illustrate a type (Fig. 15).<sup>163</sup>

Seen through these designs, the picture of Desgodets as it emerged from the study of his *Édifices* and his *Traité des Ordres* seems to change. Those works had shown him as a man very conscientious in character but tending often to be pedantic in his judgments and dogmatic in his opinions, as a man completely master of the theoretical aspect of his profession but, for that reason possibly, a somewhat dull and uninspired teacher. But now this picture no longer seems to be quite correct. Whoever created this set of designs must have had more in him than these commonplace qualities. He certainly would have considered the Rules to be of the utmost importance but they do not seem to have crippled his imagination. Nativelle's dull and hopelessly pedantic design of a church illustrates what kind of work would result from the stereotyped application of academic rules.<sup>164</sup> In contrast to these, Desgodets' designs, particularly the exterior dispositions down to particular forms, show that he took a positive attitude towards the architectural style of his time.<sup>165</sup> In some cases he was even able to point the way to future developments. A building must have been for him not an academic exercise but an organic whole, as proved by his elaborate descriptions of the many functions which a building had to fulfill. His theoretical knowledge, combined with this sound and realistic approach, must have made him an extremely competent teacher, whose influence on the next generation should not be underestimated. This appraisal finds confirmation in J.-Fr. Blondel's estimation of Desgodets, whom he names together with François Blondel, Perrault, Boffrand, and several other great architects "as the authors whose excellent books are not read often enough."<sup>166</sup>

Unfortunately, the second volume was never completed. In November 1727, Desgodets read to the Academy the chapter on the Hôtel de Ville; in May of the following year that on the Palais de Justice. He did not seem to have had time for entering these chapters into the lecture

162. R. Tournier, *Les églises comtoises*, Paris, 1954, figs. 298 and 330.

163. The two final designs—the only two of the promised set of profane buildings—are for a *Hôtel Dieu* and a *Palais de Justice* (or *Parlement*). The *Hôtel Dieu* with the *Salles des Malades* radiating starlike from the centralized chapel (reproduction of plan in Duportal, *op.cit.*) goes back originally to the Ospedale Maggiore in Filarete's Treatise and the *Hôtel Dieu* of Philibert de Lorme (*Les nouvelles inventions*, 1568). The plan of the *Hôtel de Ville* seems to revive the disposition of the French *château* of the beginning of the seventeenth century (Luxembourg and Coulomnier).

164. *Nouveau traité*, pls. 59ff.

165. Desgodets was also active as a practicing architect. He worked on the Château du Vaudreuil (Eure) in 1725, a building erected by Antoine Lepautre from 1658-1660 (see Charles Lucas, "Une lettre autographe de Desgodets," *L'Architecture*, VI, 1893, pp. 131ff.). According to Ch. Bauchal, *Nouveau dictionnaire des architectes français*, Paris, 1887, p. 179, he built from 1717-1726 the Collège de Beauvais, but no record is preserved of any major building operations at this period (cf. A. Berty, *Topographie historique du vieux Paris. Région centrale de l'Université*, Paris, 1897, pp. 103ff.). According to *Richesses d'Art de la France* (Monum. Civ., Paris, 1879, I, p. 246), Desgodets submitted plans for connecting the Louvre with the Tuileries (no source given). Apart from these statements I was able to find only one other reference to a building by Desgodets. A. Memmi (*Elementi dell'architettura lodoliana*, Rome, 1786, p. 244), mentions as an ex-

ample for the suppression of parts of the entablature the "Palazzo Pesquiges nella Provenza (di) Mr. Desgodets." I was unable to identify this building. On February 13, 1713 (IV, p. 19) Desgodets asked the Academy for advice in a matter concerning a building that he obviously had in hand.

Blomfield (*French Architecture*, I, p. 192), tries to prove that Desgodets designed the Orangerie in Versailles. It is a very doubtful supposition, and mainly the result of Blomfield's personal prejudice against Mansart (cf. Hautecœur, *Hist. de l'Arch. classique*, II, p. 554). Kimball (*ART BULLETIN*, XXII, 1940, p. 2), attributes to Desgodets three drawings for Versailles dating from 1678-1679 when Desgodets received small payments as *dessinateur*. "The admirable general sections accord well with his minute technique as we know it from the drawings in his manuscript treatises (Ha 23, 23a)." This is a very loose attribution. In the first place the drawings in the manuscript of the Bibl. Nat. are not at all admirable and in any case are quite different to those for Versailles. But, moreover, between the two sets there is a time gap of almost fifty years, if not more, since the drawings of the Bibl. Nat. date from ca. 1745. But even the earlier drawings in the manuscript of the Institut are of different and inferior quality. Desgodets' technique at the time of the drawings for Versailles is best known by the sketchbook in the Institut (see also F. Kimball, *Le style Louis XV*, Paris, 1949, pp. 50 n. 2; and 29 n. 4).

166. J.-F. Blondel, *Architecture françoise*, Paris, 1752-1756, I, p. v.

book from which the manuscript has been copied. He started on the chapter containing the Hôtel de Ville, but it breaks off after a few pages in the middle of a sentence. On May 20, 1728, Desgodets died.

As an author Desgodets was not very fortunate. After his first book, which secured him his long-lived reputation, he prepared several works for publication. None of them, neither the *Traité des ordres* nor the work on the domes nor the *Traité du toisé*, ever reached the printing press.<sup>167</sup> The *Loix des bâtiments* was published, but only posthumously, in 1748.<sup>168</sup> It was published posthumously, but at least not anonymously, the fate a few years later of part of his *Traité*. When J.-F. Blondel, in 1752, wrote his *Architecture françoise* he had Desgodets' manuscript near him and made generous use of it. First he took over an occasional sentence only, but soon he copied whole chapters only enlarging on them here and there.<sup>169</sup> He refers to Desgodets as his authority when he treats of the Attic Order and in a chapter on Statues he even names Desgodets as the author of a sentence paraphrased by him; but he does not mention him elsewhere nor does he ever divulge to the reader the fact that he was using a book written by Desgodets.<sup>170</sup> He had, as he said, in mind to treat of the Orders in an eighth book, which was never published. There can be little doubt that he would then have appropriated the relevant part of the *Traité* in the same highhanded manner as he had done with the concluding chapters. Whether, even in a time when there was a very hazy conception of intellectual property, Blondel's behavior would not have been judged to be questionable from the ethical point of view is in this context irrelevant. But we can be grateful to Blondel that, by not being too squeamish about appearing in borrowed plumes, he provided the evidence that Desgodets' work as professor of the Académie Royale d'Architecture was still valued many years after his death.

LONDON, ENGLAND

167. The *Toisé des bastimens* is preserved as manuscript in the Bibl. de l'Arsenal (nos. 2530 dated 1724, and 2531 dated 1745). The Avery Memorial Architectural Library (Columbia University) possesses a manuscript under the final title *Traité du toisé* (AA 1050 D45). It was owned by Nicolas-M. Potain (see below note 170). Desgodets read the Preface and several chapters of this *Traité* to the Academy between 1725 and 1728 (*Procès-verb.*, IV, p. 313 to V, p. 23). The neatly written manuscript in the Bibl. Nat. Dépt. des Manuscrits (anc. frang. 14843), dated 1753, is probably copied from the Avery manuscript.

The Bibl. Nat. also possesses of the *Édifices* a very fine copy with the final designs (Dépt. des Manuscrits, Ms anc. frang., 381). It contains a few additions to the printed edition of 1682, some of them possibly in the handwriting of Desgodets (pp. 51 and 52). Apart from those additions, which had already been printed as addenda (pp. 21, 96, 290), there are new ones (pp. 51, 52, 77, 160, 166, 284). This seems to indicate that this manuscript was a copy prepared by Desgodets for an edition that did not materialize (the edition of 1695 is only a re-issue).

168. *Les Loix des Bâtiments suivant la Coutume de Paris . . . enseignées par M. Desgodets . . . avec les notes de M. Goupy, s.l., 1748.*

169. It would be too tiresome to cite the corresponding texts in detail. Two specimens must be sufficient. The sentence by Desgodets (see note 140 above): "Quelque variation que l'on fasse aux profils des différentes parties d'architecture, il se faut toujours servir des moulures ordinaires et usitées dans tous les tems et n'y pas employer des moulures Gothiques sous prétexte de Nouvelle Invention" becomes with Blondel, *op.cit.*, p. 67: "Quelque variété qu'on donne aux profils, il faut se servir toujours des moulures usitées et se garder d'y en introduire dans le goût Gothique, sous prétexte de nouvelle invention." Desgodets' sentence (Ms. RIBA, p. 227) "il est dangereux en architecture comme dans les autres sciences d'introduire des

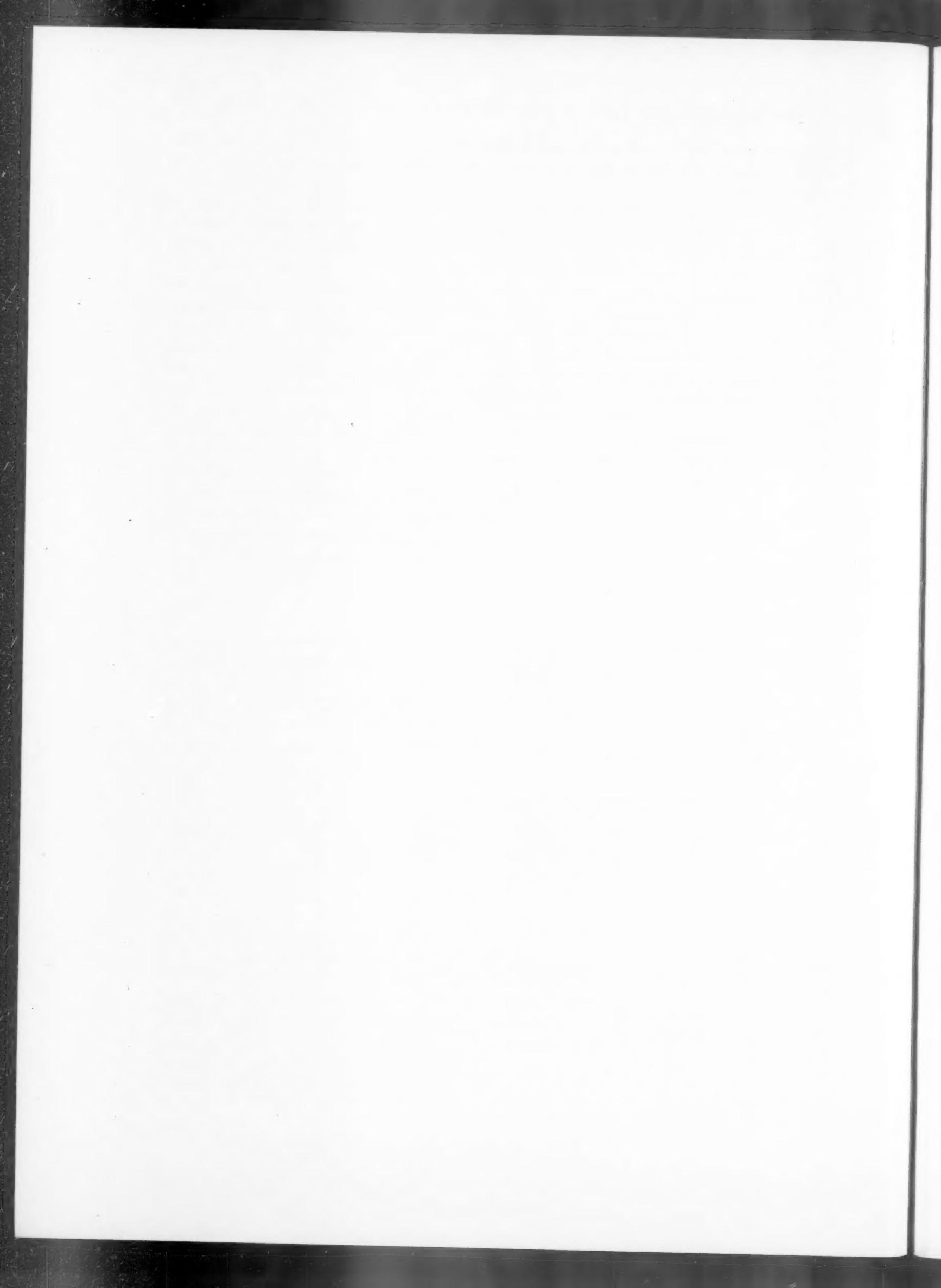
licences par l'abus qu'en peuvent faire ceux qui ne sont que demi savant il seroit beaucoup mieux de les taire que les mettre au jour . . ." is taken over by Blondel (p. 75) as: "De tout tems il a été dangereux dans l'art de bâtir d'introduire des licences, par l'abus qu'en peuvent faire ceux qui n'ont qu'une médiocre intelligence. J'ai pensé long-tems qu'il conviendroit mieux de passer sous silence celles qui se pratiquent dans le bâtiment . . .".

The following table shows the extent of Blondel's plagiarism:

Chapter on:	Blondel	Desgodets (RIBA)
<i>Édifices avec</i>		
<i>Soubassement</i>	p. 81	p. 288
<i>Attique</i>	83-87	266-279
<i>Balustres</i>	91-94	279-288
<i>Statues</i>	96-97	259-265
<i>Niches</i>	97-102	254-259
<i>Frontons</i>	102-108	237-244
<i>Portes</i>	108-111	244-248

170. *Op.cit.*, where he refers to "le sentiment des Mrs. Bruant et Desgodets," p. 84. "Cette Planche représente l'Ordre Attique . . . selon . . . le système de M. Desgodets," p. 85. ". . . selon M. Desgodets [les statues] d'en haut soient de même hauteur que celles d'en bas . . ." p. 96. "Suivant cette opinion de M. Desgodets . . ." p. 97.

Nicolas-M. Potain, who was born in 1713 and therefore too young to have studied under Desgodets, nevertheless refers frequently to him in his *Traité des Ordres d'Architecture* (Paris, 1767), and his "leçons qu'il a dictées" (p. 11), a further proof that Desgodets' manuscripts were widely used. There must have been quite a number of copies. Not so long ago another copy turned up in the Coll. Th. Lusingh-Scheuerlein in Amsterdam, which, however, I have not seen (cf. Kimball, *Style Louis XV*, p. 50 n. 2).



# ORPHISM AND COLOR THEORY\*

HERSCHEL B. CHIPP

## I

**I**N accounts of the development of nonfigurative painting, the brief movement known as Orphism has generally been considered merely an offshoot of Analytical Cubism. Generally, historians have studied more prominent movements for evidence of the abandonment of the physical object; for the moment at which colors and forms for their own sake are substituted for abstraction from nature. The evolution of Picasso's work through the "analytic" period of Cubism has been followed step by step and month by month, from the first fragmentation of the human figure in the *Demoiselles d'Avignon* to its reconstitution in terms of geometric forms as in collage and later Cubism. Cubism was basically materialistic in that the shapes employed were derived from natural objects and existed in a space that, while drastically restricted and distorted, nevertheless still referred to the space of the physical world.

A second important channel leading to the ideal of a nonfigurative painting, contemporary with the early Cubist period of Picasso and Braque, is the work of Wassily Kandinsky. The Russian, reaching his artistic maturity in Munich under the stimulus of the Expressionist movements then current in Germany, developed a nonfigurative vocabulary of colors and lines that, while rejecting the appearances of nature, still evoked the dynamism of visual experiences of it. Kandinsky's approach is distinct from the Cubist's abstraction of the forms of physical objects; his paintings objectify the interior world of the feelings by means of forms and colors that correspond with emotional states.

The painters who were called Orphists were indebted to the analytical period of Cubism for the concept of the fragmentation of objects, but their absorption with the optical characteristics of colors led the most daring of them eventually to reject objects altogether and produce an art based upon the dynamic contrasts of colors. This attitude represents a third course toward nonfigurative painting.

The word Orphism was invented by the poet and critic, Guillaume Apollinaire, and was apparently first applied in October 1912 to the colorful paintings of François Kupka.<sup>1</sup> Kupka's concern with colors as abstract elements dates from before this time, however, for a painting of 1910 was entitled "Yellow Scale," and several others of 1911 and 1912 "Planes by Colors."<sup>2</sup> He is generally credited with painting the first completely nonfigurative works in Paris, the *Amorpha, Fugue in Two Colors*<sup>3</sup> and the *Discs of Newton* (Fig. 9), both of 1912, and both of them composed of interlocking circular shapes in brilliant colors. They were stimulated by his interest in Neo-impressionist theories of color contrast and by the direct influence of Analytical Cubism. Prior to this time his work was mainly composed of vigorous decorative patterns similar to those employed in the Art Nouveau poster style.<sup>4</sup> After 1912 he continued with nonfigurative painting in two major modes; one composed of vertically arranged geometric planes of flat color, and the other

\* This paper was first presented at the meeting of the College Art Association in Detroit, January 1957.

1. One author states that this occurred at a lecture given by Apollinaire at the *Section d'or* exhibition (October 10-30, 1912); Emmanuel Siblik, *François Kupka*, Prague, Aventium, 1929, p. 13. Another states that Kupka's entries in the *Salon d'Automne* (October 1-November 8) inspired the word; L. A. Gremilly, *Frank Kupka*, Paris, Povolozky, n.d. (ca. 1921), p. 14.

2. Titles are translated from those given in the catalogues of the salons. Sometimes they vary slightly as given by different authors.

3. Exhibited at the *Salon d'Automne*, 1912. Reproduced in Alfred H. Barr, Jr., *Cubism and Abstract Art*, New York, Museum of Modern Art, 1936, fig. 61, under the title *Fugue in Red and Blue*.

4. See illustrations for *Lysistrata* (1907) and *Prometheus* (1909) reproduced in Siblik, *op.cit.*

of dynamic curvilinear or irregular shapes sometimes reminiscent of his earlier style.<sup>5</sup> Kupka employed brilliant colors, but his compositions were based upon line and pattern more than upon color contrasts, and he eventually rejected the title of Orphism altogether. His early statements on his art deal mainly with concepts of nonfigurative painting and its analogies with music, rather than with color problems.<sup>6</sup>

Francis Picabia was placed with the Orphists by Apollinaire in his book of 1913,<sup>7</sup> and again in 1914 when reproductions of six of his paintings were featured to accompany the poet's review of the Salon des Indépendants.<sup>8</sup> His colorful quasi-figurative work, *Dance at the Spring* of 1912,<sup>9</sup> is heavily dependent upon early Cubist simplification, but lacks the Cubist fragmentation of objects into a dense matrix of forms. Even in these Cubist-inspired works is a latent Dadaism that was soon to emerge in a quite different style. Picabia's theories, also, deal mainly with the aesthetics of nonfigurative art and its similarity to music, and not with color.<sup>10</sup>

Robert Delaunay is the artist most closely identified with Orphism. For the brief period from about 1912 to 1914, he aspired toward a nonfigurative painting based upon the optical characteristics of brilliant, prismatic colors so dynamic that they would function as the form. His theories are almost entirely concerned with color and light.<sup>11</sup> He exerted considerable influence upon several of his contemporaries including the Americans, S. Macdonald Wright, Morgan Russell, and Patrick Bruce, and the Blaue Reiter group, August Macke, Franz Marc, Paul Klee, and also upon Lyonel Feininger. Apollinaire became a close friend of Delaunay during 1912, and is chiefly responsible for publicizing Orphism. The poet had praised the *Ville de Paris* shown at the Salon des Indépendants of 1912<sup>12</sup> as an example of color creating structure and, when he revised the page proofs of his book on Cubism in the fall of that year, included Orphic Cubism as one of his four categories. He named Delaunay as a contributor to the new movement and mentioned Léger, Picabia, and Duchamp as participants.<sup>13</sup> Apollinaire was strongly influenced by Delaunay's theories of color and quoted from them in his own explanations of the new movement. The implications of a "pure" painting that they contained appealed to the poet, who for many years had been in the circle of the Symbolist poets where the rejection of the physical world was a constant theme.<sup>14</sup> At the time of the Indépendants in March 1914, André Salmon wrote that there was a school of Delaunay.<sup>15</sup> Apollinaire had commenced a book on Orphism during the time that he had lived with Delaunay prior to their trip to Berlin in December 1912.<sup>16</sup> The first *Herbstsalon* in Berlin in 1913 featured a salon of Orphism with the paintings of Delaunay and the decorative art objects of his wife, Sonia Delaunay, based on the same color principles.<sup>17</sup>

## II

Delaunay's obsession with color as the sole expressive and structural means was sustained by

5. See reproductions in Barr, *op.cit.*, fig. 62, and Gremilly, *op.cit.*, *passim*.

6. See his statement in the *New York Times*, October 19, 1913.

7. *Les peintres cubistes*, Paris, Figuière, 1913, p. 25.

8. *Les soirées de Paris*, March 15, 1914.

9. Philadelphia Museum of Art. Reproduced in color in *The Arensberg Collection*, Philadelphia Museum of Art, 1954, 1, no. 158.

10. See his essay "Cubism by a Cubist," in *Views on the International Exhibition Held in New York and Chicago* (pamphlet), New York, Association of American Painters and Sculptors, Inc., 1913, pp. 45-48.

11. As revealed in his notes entitled *Sur la lumière* (ms. in possession of Mme. Sonia Delaunay, Paris), translated by Paul Klee as "Über das Licht," *Der Sturm*, nos. 144-145, January 1913. A facsimile of the manuscript in French and Klee's translation are printed in *Ausstellung Robert Delaunay* (catalogue), Berne, Kunsthalle, 1951.

12. *L'intransigeant*, March 20, 1912.

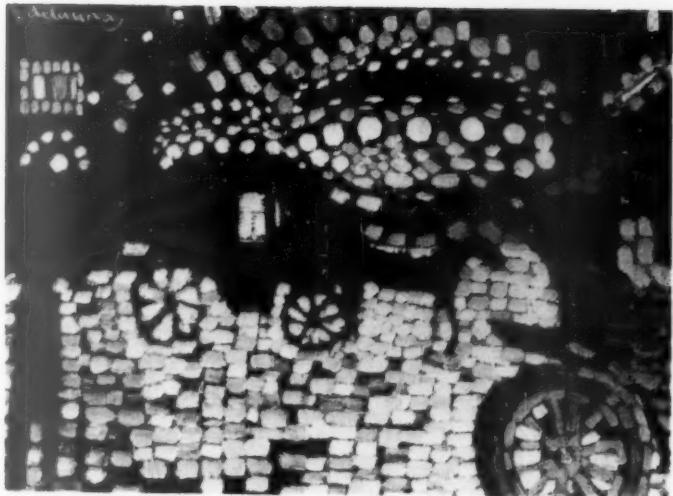
13. Apollinaire, *op.cit.*, p. 25. The poet often seemed to base his judgment of pictures upon appearances rather than conceptions, for he cited Picasso's light as an example of Orphism, and he included almost every important painter under some category of Cubism, even Matisse and Laurencin. His writings on Orphism, however, are much more consistent than those on Cubism.

14. See the first part of his book, which is mainly a pastiche of articles written between 1905 and 1913.

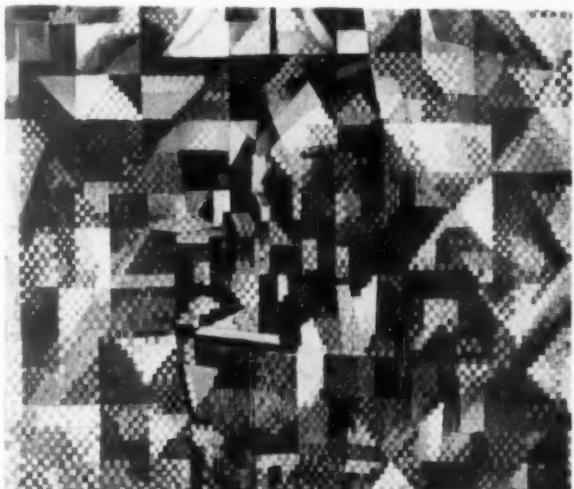
15. *Montjoie!*, March 1914.

16. See letter from Delaunay, *Art: Documents*, Geneva, January 1951, p. 3. An article by the poet, entitled "Réalité-peinture pure," that was given as a lecture at the Delaunay exhibition in Berlin, consisted mainly of quotations from the artist (*Les soirées de Paris*, December 1912, pp. 348-349).

17. See review in *Les soirées de Paris*, November 15, 1913, pp. 2-5.



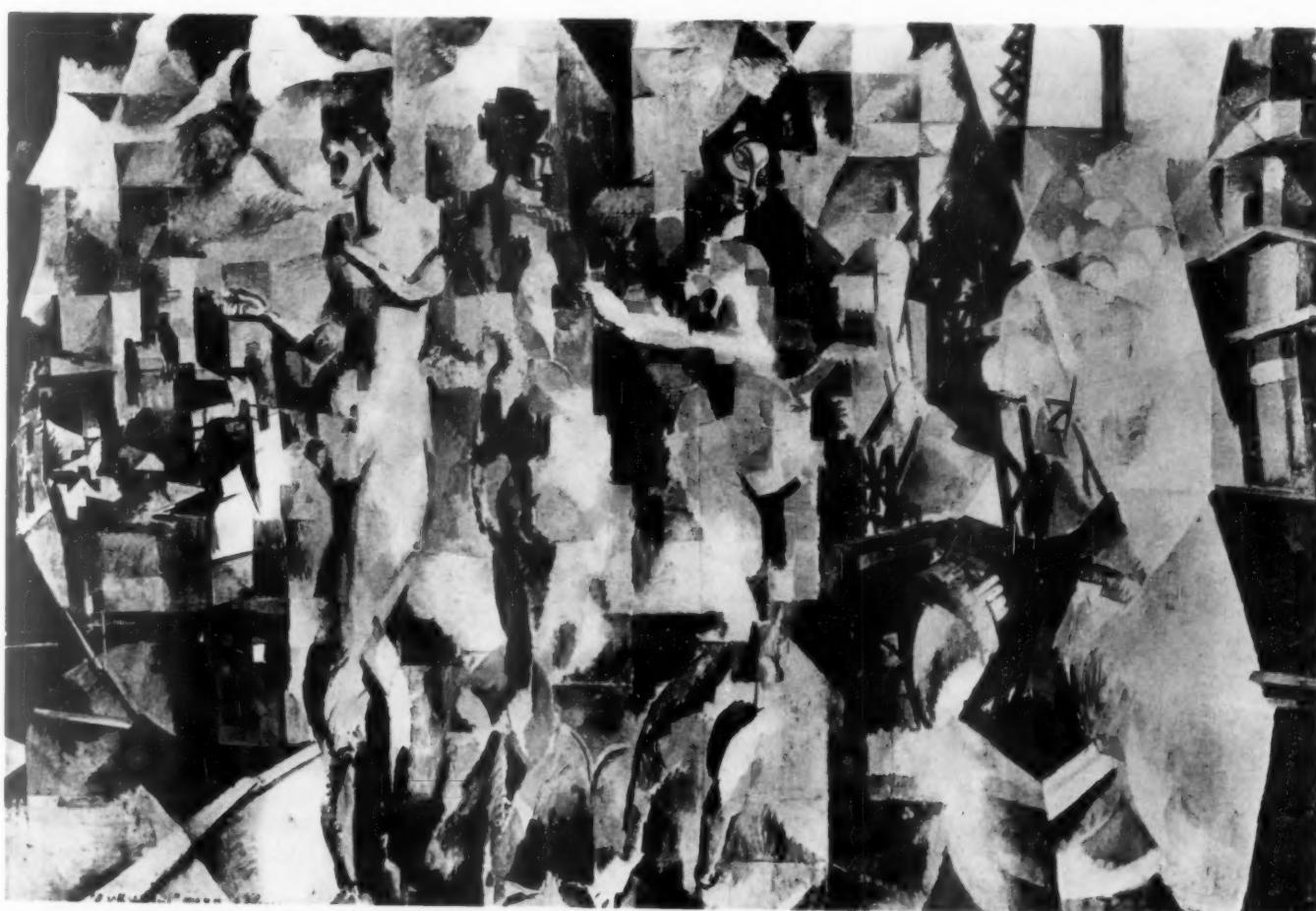
1. Robert Delaunay, *Night Scene (Le Fiacre)*, 1906-1907. Paris, Collection Louis Carré (photo: Solomon R. Guggenheim Museum)



2. Robert Delaunay, *Window on the City, No. 4*, 1910-1911  
New York, Solomon R. Guggenheim Museum



3. Robert Delaunay, *Eiffel Tower*, 1910. Basel, Kunstmuseum



4. Robert Delaunay, *Ville de Paris*, 1912. Paris, Musée National d'Art Moderne (photo: Marc Vaux)



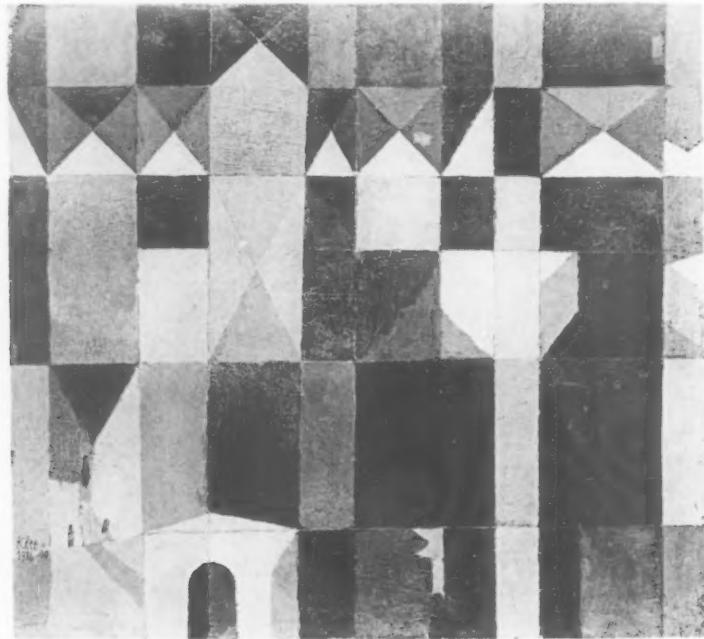
5. August Macke, *Bathing Girls*, 1913. Munich  
Bayerische Staatsgemäldesammlungen



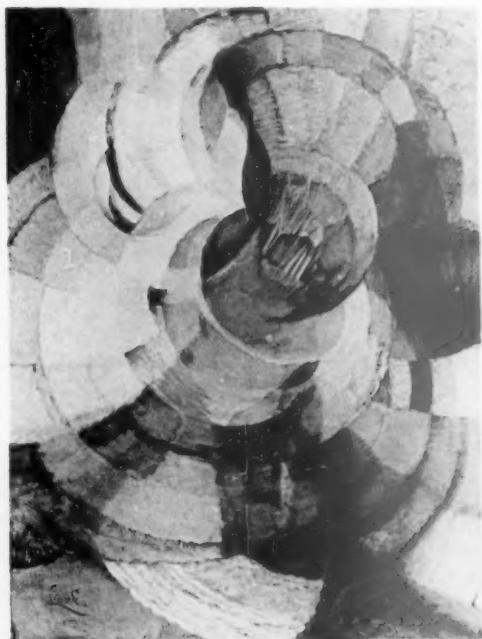
6. Franz Marc, *Mountains*, 1912  
San Francisco Museum of Art



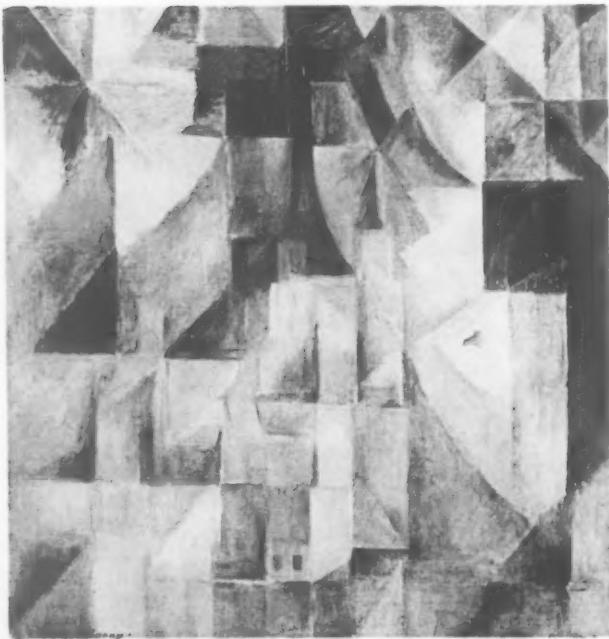
7. Robert Delaunay, *Discs*, 1913  
New York, Museum of Modern Art



8. Paul Klee, *City of Towers*, 1916  
Philadelphia, Museum of Art



9. François Kupka, *Discs of Newton*, 1912  
Philadelphia, Museum of Art



10. Robert Delaunay, *Simultaneous Windows*, 1912  
Paris, Collection Louis Carré

his study of color theory. Most important for him was a study of the experiments in color perception conducted by Eugène Chevreul, chemist and director of the dyeing processes at the Gobelins tapestry works, first published in 1839.<sup>18</sup> Chevreul made no great contributions to the science of color, but his empirically determined, practical theories of color contrast and harmony were widely read by artists. He sought to systematize the use of colors by constructing a color wheel composed of a physicist's spectrum arranged in a circular form, just as Newton had done more than a century before.<sup>19</sup> He divided the wheel into 72 equal parts making each part a uniform color instead of retaining the normal gradations of the spectrum, and he constructed a series of similar wheels adding different proportions of black to each of them. Thus he had a complete vocabulary of colors of fixed hue and value. Of most importance to artists were his practical experiments that proved what they knew intuitively—that when complementary colors are juxtaposed, each appears to be more intense than when seen in isolation. He also showed that if there is a perceptible difference in dark-light value between the two colors, then the darker will appear to be even darker and the lighter more light. Further, he made extensive tables of his experiments and observations showing that all colors present in the field of vision at the same time mutually modify one another in specific ways and to a predetermined extent. These phenomena were not merely vagaries of the human eye, but were based upon laws that were scientifically demonstrable, and were, furthermore, predictable.<sup>20</sup>

Paul Signac's theories of Neoimpressionism, first published in 1899, were highly influential on later artists.<sup>21</sup> Signac was convinced by his own study of Chevreul and other theoreticians that the element of color in painting could be controlled by the mind, and could be employed to correspond with the character of the lines in order to fortify the mood evoked by the subject. It was in an attempt to control the chaotic multiplicity of colors and the uncontrolled sensations of Impressionism that he proposed the four principles of Divisionism. These provide that the various aspects of color in a painting, that is, color of the object, of the light, and of the reflections, should be analyzed separately,<sup>22</sup> and that they may be brought into equilibrium according to the laws of contrast as set forth by Chevreul and other scientists. Thus, color was considered apart from a descriptive function and was thought of as an independent expressive means. Finally, Signac would subordinate the role of color, traditionally conceived of as the more emotional element, to the linear composition, or the more intellectual element. Thus color was to be brought under conscious control as one of the elements of the painting. In terms of Signac's immediate aims the transitory and sensuous aspects of Impressionism were systematized; as he expressed it "the hand is of no importance, only the mind and the eye."<sup>23</sup>

In his conviction that color could be scientifically controlled, Signac was dependent chiefly upon Charles Henry, director of the Laboratory of the Physiology of Sensations at the Sorbonne. Henry was well known to the artists, having discussed his theories with Signac, Seurat, and others, and Signac had made diagrams to illustrate the theories in his books. He had written extensively on the theories of art and music, on mathematics, and on techniques of painting, and was himself a poet in the circle of the Symbolists. His major works dealt with the physiology of aesthetic

18. Michel Eugène Chevreul, *De la loi du contraste simultané des couleurs*, Paris, Pitois-Levrault, 1839. Chevreul's practical approach and readable accounts made his books easily understandable to artists. Signac had visited him and Delacroix had hoped to, although it is not believed that he had actually done so.

19. A later work is made up of plates of his color wheels: *Des couleurs et de leurs applications aux arts industriels*, Paris, Bailliére, 1864.

20. Chevreul, *De la loi du contraste . . .*, ch. 1 and *passim*.

21. Paul Signac, *D'Eugène Delacroix au néo-impressionisme*, 4th ed., Paris, Flory, 1939, ch. 1 and *passim* (first published

by the Symbolist journal, *La revue blanche*, 1899).

22. *Ibid.*, pp. 13-14. According to an observer, Seurat actually proceeded by these stages; first laying in the local color, then "achromatizing" it with the color of the light falling on the surface, then adding the color of the reflections from neighboring objects, and finally including the complementaries of these colors. See Félix Fénéon's article reprinted by John Rewald in "Seurat: the Meaning of the Dots," *Art News*, XLVIII, April 1949, p. 27.

23. Paul Signac, "Les besoins individuels et la peinture," *Encyclopédie française*, XVI, 1935, p. 16.84-8.

sensations, and they analyzed experiments by which he attempted to reduce the effects of color and line to simple nervous reactions. Red is the most dynamic color, he states, and therefore corresponds to an upward direction, while its complementary blue-green is the most inhibiting color and therefore is downward in its movement.<sup>24</sup> Henry's study of the physiological effects of colors appealed to Signac and to Seurat since it reduced colors to measurable quantities, in contrast to the symbolic or metaphysical meanings attributed to them by the romantic and symbolist poets.

The possibility of a rational control of color in painting had already been stated by the theoretician Charles Blanc in his artists' handbook of 1867, which was well known to Signac.<sup>25</sup> Blanc stated that color is feminine because it is emotional, mobile, and intangible; but that drawing is masculine for it is precise, fixed, and constant. This duality may be solved by giving order to color. Color may be made to conform to fixed rules just as music, and it can be taught in the same way. In a painting color must be made subservient to form, and thus it is identified not with irrationality, vagueness, and emotionality, but rather with rationality, clarity, and order.

The theories of Chevreul and Blanc were the foundation for the articles of David Sutter that were so influential on the young Georges Seurat. Sutter somewhat dogmatically proclaimed the supremacy of the mind over the emotions in art, and he sought for laws that would govern the harmony of colors just as he believed that there were laws governing musical harmony.<sup>26</sup>

The views of these theoreticians, conditioned partly by observation and partly by scientific experiment, were given the sanction of modern science in 1879 by the textbook of an American physicist, Ogden Rood.<sup>27</sup> This book was carefully studied by Signac and other later artists. Basing his work upon the studies of Helmholtz in the sensations and perceptions of vision, Rood dealt with colors solely as visual phenomena, and hence, like Henry, freed them from the symbolic and metaphysical associations with which they had been endowed by earlier artists and theoreticians. He proved by controlled experiments that the brilliance and transparency of colors in nature could be simulated by placing on a surface adjacent dots of different colors, so that at the proper distance from the eye they would produce a lively flicker and glimmer. His experiments dealt with colored light, not with the pigments of Chevreul, and they showed that mixtures of colored light tend toward white while mixtures of pigment tend toward black; a discovery of the greatest importance to artists seeking greater brilliance and purity in their color. His familiarity with the actual practice and problems of painting gave the artists confidence in his work, and his careful laboratory experiments lent the prestige of science to the general theory of the optical mixture of colors.

### III

Delaunay's own writings on color, although influenced by scientists and theoreticians, are intuitive and sometimes random statements based upon the belief that color is a thing in itself with its own powers of both expression and form.<sup>28</sup> Painting is a purely visual art, he writes, without

24. Charles Henry, *Le cercle chromatique*, Paris, Verdin, 1888, pp. 62-67. See Seurat's cover design for a theater program made according to Henry's theories, reproduced in John Rewald, *Post-Impressionism, From Van Gogh to Gauguin*, New York, Museum of Modern Art, 1956, p. 139. This book contains much valuable material on the theories and criticism of Neoimpressionism, some of it translated for the first time.

25. Charles Blanc, *Grammaire des arts du dessin*, Paris, Renouard, 1867. For the following theories, see p. 595 and *passim*.

26. David Sutter, "Les phénomènes de la vision," *L'Art*, I, 1880 (series of six articles, *passim*): "The laws of the aesthetic harmony of colors can be taught as the rules of musical harmony are taught" (p. 219).

27. Ogden N. Rood, *Modern Chromatics*, New York, Appleton, 1879 (translated as *Théorie scientifique des couleurs*,

Paris, Baillière, 1881); see especially ch. xvi. Rood's book was written in clear, nontechnical language, comprehensible to the artists. He was himself a painter, had discussed his theories with other artists, and had studied John Ruskin's writings. Helmholtz's works (posthumously collected in Hermann von Helmholtz, *Handbuch der physiologischen Optik*, Hamburg and Leipzig, L. Voss, 1896) expressed the physiologist's view of color theory in contrast to the physical views of Newton, yet they still were highly technical, dealing with relations between the wave lengths of colors from the spectrum and optical sensations. They were, therefore, beyond the understanding of almost all the artists.

28. Excerpts from his notes are included and discussed in François Gilles de la Tourette, *Robert Delaunay*, Paris, Massin, 1950, *passim*; Denys Sutton, "Robert Delaunay," *Magazine of Art*, XLI, October 1948, pp. 208-211; Léon Dégand,

dependence upon intellectual elements, and the act of perception is in the impact of colored light upon the eye. The contrasts and harmonies of color produce within the eye simultaneous movements that correspond to movements in nature. This phenomenon of vision is the "subject" of painting.<sup>29</sup>

His early painting, like his theory, is deeply rooted in Neoimpressionism. In *Night Scene (Le Fiacre)* of 1906-1907 (Fig. 1) the vigorous activity of the lively brushstrokes in brilliant, spectral colors glowing against the dark ground is an intensification of Signac's vitalistic touch. Signac had insisted that the entire canvas be enlivened with touches of color; flat colors appear weak and smothered, he writes, while the divisionist touch and the optical mixture of colors give the surface the movement and vitality of life.<sup>30</sup> *Night Scene* represents a step closer to abstraction than Signac's work, since the brushstrokes do not conform so closely to the contours of objects but often seem to float on the surface without a descriptive function. They do not define solid objects, but the areas surrounding them, thus dematerializing the objects themselves into shadowy areas. These areas are merged into other adjacent areas, creating irregular and sometimes ambiguous shapes that are now substance and now shadow, a heritage of the *fin-de-siècle* taste for the organic unity of indefinite shapes, as in the compositions of Bonnard and Vuillard.<sup>31</sup>

Although the spectral colors of Neoimpressionism were momentarily abandoned in the next stage, the Eiffel Tower series, a new lesson was learned—the fragmentation of solid objects and their merging with space. Influenced by Cézanne, Analytical Cubism, and Futurism, Delaunay found in the Eiffel Tower, which Seurat also admired, a structure adequate to his own need for form, and at the same time one that in reality actually fragments space and light. In the *Eiffel Tower* of 1910 (Fig. 3),<sup>32</sup> this interpenetration of tangible objects and surrounding space is accompanied by an intense movement of the geometric planes that is more active than the static equilibrium of Cubist forms, and yet it conforms more to the pictorial structure of the picture than the somewhat cinematographic movements of Futurism. Delaunay writes that the unification of object and space is possible only after the homogeneity of the object as a solid physical entity has been destroyed, a step which was already anticipated by Cézanne and demonstrated in Analytical Cubism. He continues: "The watercolors of Cézanne announce Cubism; the colored, luminous planes destroy the object. . . . To destroy the object means to destroy the expressive means which painters have employed since David. . . . After having broken the line, the line which has existed for a long time, one can no longer restore it or reassemble it."<sup>33</sup>

In some of the Eiffel Tower series, he begins to employ color that is as dynamic as the form, in fragmented areas and strong contrasts of vermillion, orange, yellow, and green. With this series he begins to combine the coloristic tradition of Neoimpressionism with the formal structures of Cubism.

The unification accomplished between the fragmented physical objects and the space as attempted in the Eiffel Tower series is carried further in the dense matrix of forms in the later *Window on the City* of 1910-1911 (Fig. 2).<sup>34</sup> Although based on architectural forms, it is more abstract than the Eiffel Tower series and most of Cubism of the same date. The uniform divisionist stroke re-

"Robert Delaunay," *Art d'Aujourd'hui*, October 1951, pp. 6-11. For a study of color theory in modern painting, which includes sections on Delaunay, Signac and Seurat, the Cubists, Kandinsky, Marc, and Klee, see Walter Hess, *Das Problem der Farbe*, Munich, Prestel, 1953. A study of Delaunay's writings is being prepared by Pierre Francastel: *Robert Delaunay: Du cubisme à l'art abstrait*, S.E.V. P.E.N., Paris.

29. *Sur la lumière*, loc.cit. (cf. note 11 above).

30. Signac, *D'Eugène Delacroix . . .*, p. 16.

31. Cf. Bonnard's *The Cab Horse*, *Bd. des Batignolles*, ca.

1895, reproduced in John Rewald, *Pierre Bonnard*, New York, Museum of Modern Art, 1948, p. 68.

32. See color reproduction in Maurice Raynal, *Picasso to Surrealism*, Geneva, 1950, p. 71.

33. Translated from Delaunay's notebook, collection of Mme. Sonia Delaunay, Paris. Cited in part in Gilles de la Tourette, *op.cit.*, pp. 36-38.

34. See color reproduction in Werner Haftmann, *Malerei im 20 Jahrhundert*, Munich, Prestel, 1955, plates, p. 188.

appears in a more controlled and abstract manner, and the vivid contrasts of violet, blue, pink, and crimson partake more of the quality of light.

But here a major problem arose, Delaunay writes, in the conflict between color that should exist by and for itself, and the fragments of objects that refer to the physical world. His distinction is similar to Kandinsky's dualism between "concrete" art that includes only nonrepresentational colors and lines, and "objective" art, where colors and lines are tainted by their dependence upon natural objects.<sup>35</sup> The existence of the reminiscence of nature in painting is not a problem for the Cubists, Delaunay continues, for Cubism is basically graphic or linear, and the fragments of real things that refer to the physical world can be assimilated. But when painting is motivated entirely by color, then these fragments of real things cannot exist along with it. He writes: "I set myself the problem of formal color."<sup>36</sup>

This problem is still unresolved in the *Ville de Paris* of 1912 (Fig. 4),<sup>37</sup> where the figures and landscape elements retain their representational character even though broken up into a vibrant pattern of colored planes. Delaunay believed that a resolution was possible only when the color contrasts were felt to be sufficiently dynamic to sustain the picture when the objects had disappeared. Apollinaire explained this painting as: ". . . forms fractured by light create colored planes. These colored planes are the structure of the painting and nature is no longer a subject to be described, but a pretext, a poetic evocation of expression by colored planes which order themselves by simultaneous contrasts. Their colored orchestration creates an architecture which unrolls as phrases of color and ends in a new form of expression in painting, Pure Painting."<sup>38</sup>

In the several versions of *Simultaneous Windows* of 1912 (Fig. 10),<sup>39</sup> there are still suggestions of the architectural forms that were a part of the earlier paintings, but the structure of the picture is a grid of quasi-geometric forms that are almost completely nonfigurative. The color is even more brilliant than in the Window on the City series, and partakes of the quality of colored light. It was this series that inspired Apollinaire to write the poem *Les fenêtres* where he extols the lyricism of color.

"La fenêtre s'ouvre comme une orange,  
Le beau fruit de la lumière."<sup>40</sup>

It was also at this time that he included Orphic Cubism among his four categories in his book on the Cubist painters, and named Delaunay as a major contributor to it. He explained that it "is the art of painting new structures out of elements which have not been borrowed from the visual sphere, but have been created entirely by the artist himself, and have been endowed by him with a powerful reality."<sup>41</sup>

In this series the objects so important for Cézanne and Cubism were almost completely purged, and with them were purged the characteristics of the physical world: tangibility, space, and light and dark. Light and dark values, which were retained from the phenomenal world by the Cubists, were abolished in favor of differences of hue. The vigorous simultaneous contrasts of these hues were to create within the picture proper a luminous colored light that permeated the painting.

During 1913 in the Discs series (Fig. 7),<sup>42</sup> the intensity and movement of the color contrasts convinced Delaunay that he had approached the ideal of a pure color, where color conveyed the expression, so that the shapes of the objects of nature were no longer necessary. His intoxication

35. See Peter Selz, "The Aesthetic Theories of Wassily Kandinsky and Their Relationship to the Origin of Non-Objective Painting," *ART BULLETIN*, XXXIX, 1957, pp. 127-136.

36. Notebook, *loc.cit.* (cf. note 33 above).

37. See color reproduction in Gilles de la Tourette, *op.cit.*, pl. 10.

38. Quoted in *ibid.*, p. 39.

39. See color reproduction of a similar work in this series, *ibid.*, pl. 12.

40. André Billy, *Guillaume Apollinaire*, Paris, Pierre Seghers, 1947, p. 128.

41. *Les peintres cubistes*, p. 25.

42. See color reproduction in A. H. Barr, Jr., ed., *Masters of Modern Art*, New York, Museum of Modern Art, 1954, p. 77.

with color is reflected in his statements. "In painting by pure colors it is the color itself and its contrasts that form the structure . . . and not the use of other devices such as geometry. Color is *form and subject*. It is the sole theme that develops, transforms itself, aside from all analysis, psychological or otherwise. Color is a function of itself; all its action is in force at every moment. . . . I used the scientific word of Chevreul: 'the simultaneous contrast.' . . . I played with colors as one would express himself in music by a fugue of colored, varied phrases."<sup>43</sup>

## IV

While the Orphists' concern with nonfigurative painting and their taste for brilliant color were unique traits among the Cubists in 1912, the artists of the Blaue Reiter group in Munich were deeply concerned at this time with these very problems. By about 1911 Wassily Kandinsky had purged the visible aspects of nature from many of his paintings in favor of an "inner meaning," and in 1912 he wrote that "the inner note of the organic form will be heard even though this organic form has been pushed into the background."<sup>44</sup>

In contrast to the more rational attitude of the French artists and theoreticians, Kandinsky, Paul Klee, Franz Marc, and August Macke rejected scientific theories, considering colors in rather specific psychological or metaphysical terms, as in the theories of Phillip Otto Runge and Goethe.<sup>45</sup> Kandinsky worked out a synesthesia where musical sounds, states of nature, emotions, and colors were all related in a manner similar to the theories of "correspondence" of the Symbolist poets. While he writes that colors are combined in a painting solely according to their "spiritual significance," yet he recognizes the optical effects of certain colors, such as the apparent tendency of cool colors to recede and contract and warm colors to advance and expand.<sup>46</sup>

The Blaue Reiter artists were well acquainted with recent painting in Paris, all of them having lived and studied there prior to the formation of the group. When Delaunay's entries in the Salon des Indépendants of 1911 stood out from the austere tonalities of the Cubists, Kandinsky invited him to show in the first Blaue Reiter exhibition in Munich in December of that year. Among his four entries were two of the *View of the City* series of 1911, similar to *Window on the City* (Fig. 2). His work was greatly admired by the German artists; three of the paintings were sold and three were reproduced in the Blaue Reiter almanac.<sup>47</sup> He was visited in Paris in 1912 by Klee, Marc, and Macke at the time that he was developing his most brilliantly colorful work, the series of Windows and Discs, and their own interest in color was stimulated by his concept of simultaneous contrasts. An exhibition of his work was arranged by Herwath Walden at the Sturm gallery in Berlin late in 1912, and Delaunay and Apollinaire traveled there, visiting Macke in Bonn on the way. Apollinaire gave a lecture in the gallery, quoting mainly from Delaunay's theories

43. Notebook, cited in part in Gilles de la Tourette, *op.cit.*, p. 37, and Sutton, *op.cit.*

44. Wassily Kandinsky, *On the Spiritual in Art* (trans.), New York, Solomon R. Guggenheim Foundation, 1946, p. 50. First published as *Über das Geistige in der Kunst*, Munich, Piper, 1912. See another account of Kandinsky's transition to nonfigurative painting in Kenneth Lindsay, "The Genesis and Meaning of the Cover Design for the First 'Blaue Reiter' Exhibition Catalog," *ART BULLETIN*, XXXV, 1953, pp. 47-50.

45. Despite the mystical nature of his views of color that based the three primary colors on the symbolism of the Trinity and conceived of white as good and black as evil, Runge developed first the idea of the complete color sphere, with white at the top, black at the bottom and pure hues about the middle. In his system every color had a specific place and no color could exist in more than one place. In this respect he was ahead of the scientists, for even Chevreul did not conceive of a complete color system. (J. B. C. Grundy, *Tiecke und Runge*, Strasbourg, 1930, and Wilhelm Ostwald, *Colour Science*

[trans.], London, Winsor and Newton, 1931, I, p. 12).

Goethe's theories are mainly an attempt to draw color theory out of the realm of physics, where Newton's discoveries had placed it, and into physiology and psychology; from an external physical to an internal psychological phenomenon (J. W. von Goethe, *Farbenlehre*, Jena, 1928, and Ostwald, *op.cit.*, pp. 15-17). Adolph Hoelzel (1853-1934), to a greater extent than most other artists, consciously used colors according to a system of pairs of contrasts: dark-light, cold-warm, complementaries, high and low intensities, quantities, color - no color, and simultaneous contrasts. (*Adolph Hoelzel* [catalogue], Stuttgarter Galerieverein, 1953.)

46. Kandinsky, *op.cit.*, pp. 51f., 60.

47. Reproduced: *St. Severin* (1909), *Eiffel Tower* (1910) and *View of the City* (1911). An article, "Die Kompositionsmittel bei Robert Delaunay," praised his movement acquired by means of color. (Wassily Kandinsky and Franz Marc, ed., *Der Blaue Reiter*, Munich, Piper, 1912.)

of simultaneous contrasts and on light. The first *Herbstsalon* in Berlin in 1913 featured a salon of Orphism with forty-five works by Robert and Sonia Delaunay.

Delaunay's brilliant color was for the Blaue Reiter artists a continuation in post-Cubist terms of the French coloristic tradition as in Impressionism, Neoimpressionism and Fauvism, all of which had been seen in major exhibitions in Germany and were greatly admired. His colorful and rhythmic versions of the constructive principles of Cubism were more easily assimilable for the German artists than the austere and monochromatic works of Picasso and Braque. Klee wrote in 1912 that he liked his work because he had avoided the Cubist absorption with construction and the materiality of objects.<sup>48</sup>

Macke's painting had more in common with Delaunay's subject-matter, form, and color than it did with his fellow members of the Blaue Reiter. He was not a theorist, but through conversations and correspondence came to agree with Delaunay's concept of the simultaneous contrast of prismatic colors. Shortly after the beginning of their close friendship he began to achieve in his paint the purity of colored light, and he divided the picture up into colored planes that vibrated simultaneously over the surface, as in the *Bathing Girls* of 1913 (Fig. 5).<sup>49</sup>

Although Marc had developed his own system of complementary colors, his views on color were not scientific but were Expressionist associations of colors with sounds and metaphysical states of nature similar to those of Kandinsky.<sup>50</sup> He had worked with Neo-impressionist color and brush-stroke before he had developed his familiar style of rhythmically arranged animal figures. The influence of the Cubists and Delaunay, as well as the Futurists, after his visit to Paris in 1912 was very strong. Beginning with this year his graceful curvilinear forms were fractured and fragmented into interpenetrating geometric planes that produced brilliant contrasts of prismatic colors. Although his landscape and animal forms retained the dynamic force of his own expressionist view of nature, these were given order and direction by the Cubist planes, and intensity by Orphist color. The fusion of these traditions is present in *Mountains* of late 1912 (Fig. 6),<sup>51</sup> painted just after his visit to Paris.

Klee was primarily a draftsman before his interest in color was stimulated by his association with the Blaue Reiter artists. The exhibition of Delaunay's paintings in Munich in 1911 and the meeting of the two artists further revealed to Klee the expressive possibilities of color as an element independent of line. A trip to Tunis in 1914 with Macke stimulated a new phase of brilliant color for both of them that was embodied in simple flat planes often freed from a representational end. He wrote in his diary at that time that "color has claimed me . . . color and I are one. I am a painter."<sup>52</sup> Klee's resourcefulness in drawing and color employed numerous techniques and motifs derived from Delaunay and the Cubists, such as the *City of Towers*, 1916 (Fig. 8), *The Niessen*, 1915,<sup>53</sup> and *Hommage à Picasso*, 1914.<sup>54</sup> The last is closer to Delaunay's style of color and avoidance of dark-light tonality than it is to Picasso.

The idea of the simultaneous contrast of brilliant colors was taken up by a group of other artists in Paris who met during the summer of 1913 at Delaunay's studio, among them Marc Chagall

48. Cited in Will Grohmann, *Paul Klee*, New York, Abrams, 1954, p. 142.

49. For color reproductions of paintings of 1913-1914, see Gustav Vriesen, *August Macke*, Stuttgart, Kohlhammer, 1953, esp. pp. 55, 81, 93, 101, 143. Macke's admiration for Delaunay's painting is described by Vriesen (pp. 114-118) where Macke writes that "Delaunay gives movement itself, the Futurists illustrate movement." For an analysis of Macke's use of color to create light, see Max Imdahl, "Die Farbe als Licht bei August Macke," *August Macke* (exhibition catalogue) Landesmuseum, Münster, 1957.

50. Alois J. Schardt, *Franz Marc*, Berlin, Rembrandt, 1936, p. 72.

51. See color reproductions of paintings of 1913, *ibid.*, p. 141; Haftmann, *op.cit.*, p. 173.

52. Raynal, *op.cit.*, p. 100.

53. See color reproduction in Grohmann, *op.cit.*, p. 127. After this paper had gone to press I discovered a watercolor by Paul Klee, entitled *Fenster* of 1919, where the direct influence of Delaunay is unmistakable. It is composed of colorful geometric forms similar to those in Delaunay's *Windows*, but arranged in a looser and more fanciful relationship (Collection of Hannah Becker vom Rath, Hofheim am Taunus, Germany. Reproduced in color in Hans Konrad Roethel, *Modern German Painting*, New York, Reynal, 1957, p. 42).

54. See reproduction, Grohmann, *op.cit.*, p. 131.

and the Americans, Patrick Bruce,<sup>55</sup> S. Macdonald Wright,<sup>56</sup> and Morgan Russell.<sup>57</sup> In 1913 the three Americans launched the Synchromist movement that was heavily dependent upon Delaunay, both in its theory and in its brilliantly colored, nonfigurative forms. Their exhibitions in Munich and Paris were accompanied by considerable propaganda, much of it rejecting Delaunay's Orphism. Wright returned to America, followed by Russell, where Synchromism was hailed by his brother, the critic Willard H. Wright, as the newest modern movement. At home Wright developed and taught to a large following his own color system that was based upon color chords with intervals patterned after musical chords.<sup>58</sup>

Delaunay's burst of brilliant hues had anticipated and stimulated the colorfulness that was slowly to return to Cubism during the succeeding decade.<sup>59</sup> His most original period and the Orphist movement came to an end in 1914, but for later artists it had established the idea of the independent, expressive, and structural power of color as a basis for the further development of nonfigurative painting.<sup>60</sup>

UNIVERSITY OF CALIFORNIA, BERKELEY

55. See a reproduction of *Composition II*, ca. 1917, in *Collection of the Société Anonyme*, Yale University Art Gallery, New Haven, 1950, p. 142.

56. See a reproduction of *Conception Synchromy*, ca. 1913, in Milton W. Brown, *American Painting from the Armory Show to the Depression*, Princeton, 1955, p. 65.

57. See a color reproduction of *Four Part Synchromism*, No. 7, 1914, in *Art News*, LIV, November 1955, cover. Russell was the leading figure in the Synchromist movement and the teacher of Wright. His work was reproduced by Apollinaire in *Montjoie!* in 1913 and 1914.

58. Wright, believing in the basic similarity of visual and aural stimuli, worked out a scale of twelve colors which he considered equivalent to the seven-tone musical scale. He constructed a series of color chords with intervals like musical chords, and was convinced that he could translate color sensations into corresponding musical sensations. His theories were doctrinaire, but he had realized the basic difference between painting in terms of dark-light values and painting in terms of color contrasts—a concept already developed by Delaunay in 1912. See S. Macdonald Wright, *A Treatise on Color*, Los Angeles, privately printed, 1924, not illustrated. (Three of his color charts are reproduced in *Museum of Modern Art Bulletin*, XXI, 2, 1953-1954, p. 5.) His brother, W. H. Wright, was an important and respected critic who took up a defense of Synchromism, proclaiming it the culmination of all modern tendencies (*Modern Painting*, New York, John Lane, 1915, ch. XIII).

59. Ostvald (*op.cit.*, pp. 5-7) points out the basic physical differences between color sensations and musical sounds, namely that the pitch of musical sounds changes in proportion to change in the frequency of vibration, while with color a change of frequency of vibration produces an initial change in hue which eventually tends back toward the original hue. The musical scale is continuous from the lowest to the highest perceptible note, while the color spectrum that passes from red to violet almost returns to the original hue at the same time that the frequency of vibration approximately doubles. This anomaly, that was little understood by scientist and artist alike, seems to limit the possibilities of comparison of music and painting to poetic analogy only.

60. Hans Hofmann and Delaunay were close friends during the period discussed here and shared the conviction that the simultaneous contrasts of color could create form (see his recent essay "The Color Problem in Pure Painting—Its Creative Origin" in Frederick S. Wright, *Hans Hofmann*, Berkeley,

University of California Press, 1957, pp. 51-56). Hofmann, like Delaunay, makes a distinction between the concept of tonal painting, where color is subservient to dark and light values, and simultaneous contrasts, where the entire area is color and creates light by its own contrasts. Tensions are produced between colors just as between planes, and both these tensions create the structure. Hofmann's teachings have been influential on a great number of leading abstract painters in America.

61. After this paper was completed an article appeared on Kupka: Lillian Lonngren, "Kupka: Innovator of the Abstract International Style," *Art News*, LVI, November 1957, pp. 44-47, 54-56. Miss Lonngren shows that Kupka followed a consistent development from an academic version of the Art Nouveau pictorial style to completely nonfigurative works, and she shows that this development began as early as 1909. Both his styles go back to the earlier date; the geometric flat planes have their origin in an enlargement of Signac's orderly brush stroke, and the interlocking curvilinear forms are indebted at the early stage to Cubist analysis. Thus Kupka's precedence in arriving at nonfiguration seems to be demonstrated.

His interest in color theory could hardly fail to have been stimulated and influenced by his occasional participation in the discussions of the "Puteaux group" of painters, which met next door to his studio in Puteaux, comprised of the three Duchamp brothers, Gleizes, La Fresnaye, Léger, Metzinger, Picabia, the poet Apollinaire, and the American painter and critic Walter Pach (Bernard Dorival, *Le Cubisme* [exhibition catalogue] Paris, 1953, p. 30). They were inclined toward theorizing; on mathematical means for composing a picture (their two exhibitions were entitled *Section d'Or*); on scientific theories of color, especially those of Rood, Signac, Henry, and Chevreul; and they speculated upon the possibility that painting could achieve a degree of purity of form analogous to the purity of musical sounds. Both Picabia and Kupka were strong colorists, but they were concerned in their own statements more with the problem of the validity of nonrepresentation than with color theories (see notes 6 and 10). In a recent study of Synchromism, Michel Seuphor ("Synchromies," *L'Oeil*, January 1958, pp. 56-61) proposes that although both Wright and Russell abandoned their abstract style a few years after they had launched the movement, they nevertheless figure among the ancestors of contemporary nonfigurative painting. This article includes a color reproduction of Wright's *Synchromy* of 1914 (p. 56).



## NOTES

### A LOST MASTERPIECE BY CARAVAGGIO\*

EMMERICH AND CHRISTA BACK-VEGA

The *Crucifixion of St. Andrew* by Michelangelo da Caravaggio was shown publicly for the first time in three hundred years at the 1955 exhibition of the L'Age d'Or Espagnol in Bordeaux. An oil painting on canvas (200 cm x 150 cm), this work is not mentioned in recent literature on Caravaggio because only in 1954 was its authorship ascertained. In May 1954, a photograph of it was sent to Professor Giuseppe Fiocco in Padua. He thought he recognized the hand of Caravaggio but withheld final judgment until he could see the original, which was then in Zurich for reasons of expertization and safe keeping.<sup>1</sup> Fiocco called in Herman Voss of Munich for consultation. A joint examination, made June 1, 1954, in the studio of the restorer, Richard Olbertz,<sup>2</sup> verified the opinion that this painting is the long-lost original by Caravaggio, hitherto known only through a badly preserved copy in the Museo Nacional in Toledo.<sup>3</sup> Since the writing of this paper, these opinions have been supported by Prof. Antonio Morassi.

The first literary mention of Caravaggio's *Crucifixion of St. Andrew* is in Bellori's biography, which says that among works by Caravaggio exported outside Italy was this one, taken to Spain by the Conte de Benavente, Viceroy of Naples.<sup>4</sup> An earlier reference is found in a document of 1619,<sup>5</sup> which states that on November 25 of this year a committee of painters in Amsterdam, commissioned to examine a *Crucifixion of St. Andrew*, handed in the verdict that the painting in question was a major work by Caravaggio: "Bernaerdt van Someren, age 47; Willem van den Bundel, about 43 years of age; Pieter Lastman, about 36 years of age; Adriaen van Nyenlant, about 33 years of age; and Louys du Pret, approximately 30 years of age—all

well-known painters who reside in this city and who are known to me, the Notary—appeared before me and swore a solemn oath that, at the request of Jacob van Nyenlant and Franschoys Seghers, who live in Antwerp, they are convinced that they firmly established that the painting known as the *Crucifixion of St. Andrew*, which had been purchased by Franschoys Seghers from Pieter de Wit, is to the best of their knowledge and belief a major work by Michel Angelo Caravaggio. . . ."

Longhi was of the opinion that the painting referred to in this document was the same as that mentioned by Bellori and carried to Spain by the Conte de Benavente.<sup>6</sup> He also suggests a date for the work on the basis of the Toledo copy, saying that while the copy is in bad condition, it nevertheless affords a clear idea of the conception: "one of the crudest scenes by the master," he would place it in Caravaggio's first stay in Naples, 1607, the period of *Madonna del Rosario* (Vienna Museum).<sup>7</sup>

J. Ainaud does not agree that the painting purchased by the Conte de Benavente was identical with that judged in Amsterdam in 1619:<sup>8</sup> he demonstrates that the *Crucifixion of St. Andrew* was exhibited at the Benavente castle in Valladolid, Spain, in 1610, the year of the retirement of Don Alfonso Pimentel de Herrera, Conte de Benavente, as Viceroy of Naples, a post he had held since 1603; and that in the inventory of Benavente paintings of February 10, 1653, one finds the following estimate and description:<sup>9</sup> "a very large painting on canvas that depicts the naked St. Andrew about to be fixed to the cross, with three persecutors and one woman. Together with the ebony frame, valued at 1500 ducats . . . an original work by Michelangelo da Caravaggio." Since there is no evidence that this painting left Spain between 1610 and 1653, Ainaud concludes that the Amsterdam *St.*

\* The Editor reports with profound regret the death of Dr. Back-Vega shortly before the publication of this Note.

1. The author acquired the painting in October 1953 from the Museum of Fine Arts in Budapest, in exchange for other paintings from his collection in Vienna. All that is known of the painting's whereabouts previously is that before World War II it was in the collection of the owner of the Ernst Museum in Budapest, that in 1945, after Russian occupation of Hungary, it was placed briefly in the Austrian Embassy at Budapest and was thence removed to the Museum of Fine Arts.

2. As yet the work has not been restored. It has darkened to some extent.

3. Cf. R. Longhi, *Proporzioni*, I, 1943, pp. 17, 18, fig. 26.

4. G. P. Bellori, *Le vite de' pittori, scultori, et architetti*, Rome, 1672, p. 214: "Il conte de Benavente, che fu Vice Rè di Napoli, portò ancora in Spagna la crocifissione di Santo Andrea, e'l Conte di Villa Mediana ebbe la mezza figura di Davide e'l ritratto di un giovine con un fiore di malarancio in mano. Si conserva in Anversa nella Chiesa de' Domenicani il quadro del Rosario, & è opera che apporta gran fama al suo pennello."

5. The document is published by Kurt Freise, *Pieter Lastman, sein Leben und seine Kunst*, Leipzig, 1911, pp. 9f.: "Op huyden den 25. Novembris 1619 compareerden Mrs. Bernaert

van Someren, out omrent 47 jaren, Willem van den Bundel, out omrent 43 jaren, Pieter Lasman, out omrent 36 jaren, Adriaen van Nyenlant, out omrent 33 jaren, en Louys du Pret, out omrent 30 jaren, alle gerenommeerde schilders wonende binnen deser stede, my Notario bekent, ende hebben by ware woorden in plaatse van eede solemneel ten versoecke van Jacob van Nyenlant, als last hebbende van Franschoys Seghers, wonende tot Antwerpen, getuygt, verclaert ende geattestaert, waerachtig te wesen, dat het schilderij, namentlijk een *Crucifix van St. Andries*, 't welck bij Franschoys Seghers voorm. van Pieter de Wit gecocht is, naer haer getuyges och en de beste wetenschap is een principael van Michael Angelo Caravaggio, daervoren sy getuygen tselve stuck ook zijn houdende, seggende oversulcs tselve stuck een principael van de voorz. d'Angelo te wesen."

6. Longhi, *loc.cit.*

7. *Loc.cit.*

8. J. Ainaud, "Ribalta y Caravaggio," *Anales y Boletín de Arte de Barcelona*, V, 3, 1947, pp. 380f.

9. *Ibid.*, p. 381: "Iten, un lienzo muy grande de pintura de San Andrés desnudo quando le están poniendo en la cruz, con tres sayones y una muger. Con moldura de ébano. Todo lo tasaron en mil y quinientos ducados. Es de Micael Angel Carabacho, orixinal."

*Andrew* must have been another work. He can give us no information about what happened to the Benavente painting after 1653.

In his excellent *Caravaggio Studies*, Walter Friedlaender suggests that the Amsterdam work was a copy, made directly from the original, by the Flemish painter, Louis Finsonius, while he was in Naples, sometime between 1607 and 1612.<sup>10</sup> Friedlaender also differs from Longhi on the dating of the original, proposing, instead, that Caravaggio executed it during the last year of his life, in 1610, while in Naples for the second time.<sup>11</sup>

With the recent reappearance of the *Crucifixion of St. Andrew* of which we write here, the genuine work seems at last to be recovered. It bears all the characteristics of the great master's style: the grandiose conception, the power and drama of composition, the transparency of atmosphere, the natural depiction of the muscles of the saint's body, the marvelous modeling of each rib, the dense solidity of all material objects. The handling of light is true to Caravaggio at the height of his powers. It enters from one side and the figures are plastically developed by it, while local colors are dissolved in this general illumination.

More specifically, and in agreement with what Friedlaender says, the painting is characteristic of Caravaggio's late period. Knowing the circumstances of the last years of Caravaggio's life, one cannot help but interpret this as a scene of the artist's own anguish at that time. St. Andrew is tortured, not killed, reminding one of the persecution that Caravaggio suffered, after he had fled Malta, at the hands of Girolamo Varays, Cavaliere of Justice and Grandmaster of the Maltese Knights. Although he has not portrayed himself, Caravaggio has chosen St. Andrew to represent his sorrows. The merciless and stern persecution of the Cavaliere of Justice is expressed in the fact that the Maltese is represented by the executioner who stands there, immobile, with a certain pleasure in the cruel action. One notes the deeply sorrowful, but pa-

tient and noble countenance of the saint, the painful contortion of his body. To contrasts of light and shade are added contrasts of emotion. Next to the stern and cruel officer we see the head of a man who shivers and trembles as he witnesses the martyrdom.

VIENNA, AUSTRIA

#### SOURCES FOR DELACROIX'S DEATH OF SARDANAPALUS

BEATRICE FARWELL

Certain features of *The Death of Sardanapalus* (Fig. 1), Delacroix's major entry in the Salon of 1827-1828, present two problems that, as far as I can determine, have not been studied. First, the painting has been regarded universally and with some justification as a subject drawn from Byron. I intend to show that the literary source is at least somewhat more complex, and perhaps not directly from Byron at all. Second, in view of the pictorial evidence that Delacroix consulted ancient Near Eastern material, and the fact that this material cannot have been Assyrian, I shall present at least a hint of what kind of archaeological resources he used.

#### I

Byron's poetic drama *Sardanapalus* was written in 1821 in Ravenna, and was first published in London in December of the same year.<sup>1</sup> George Heard Hamilton has established that Delacroix read Byron in French, in the edition of complete works in prose translation by Amédée Pichot, published by Ladvocat from 1822 to 1825.<sup>2</sup> In the same article, Professor Hamilton admirably surveys the relationship between the painter's work throughout his career and the poems of Byron, beginning with what was probably Delacroix's first Byronic subject, the *Combat du Giaour et du Pacha* in 1824.<sup>3</sup> Given the painter's acknowl-

10. W. Friedlaender, *Caravaggio Studies*, Princeton, 1955, pp. 134, 200, 210. Friedlaender cites an earlier publication of the Amsterdam expertise (cf. note 5 above): N. de Roever and A. Bredius, "Pieter Lastman en François Venant," *Oud Holland*, IV, 1886, p. 7.

11. *Ibid.*, p. 134.

1. P. E. Moore, ed., *The Complete Poetical Works of Byron*, Boston, Houghton Mifflin, Cambridge Edition, 1933, p. 477.

2. George H. Hamilton, "Eugène Delacroix and Lord Byron," *Gazette des Beaux-Arts*, Ser. 6, XXIII, 1943, pp. 105ff.

3. Delacroix began a painting on this subject on May 11, 1824 (cf. Delacroix, *Journal*, Paris, 1893-1895, I, p. 116) which Hamilton identifies with the *Combat du Giaour et du Pacha* (Robaut, *L'oeuvre complet d'Eugène Delacroix*, Paris, 1885, no. 202), usually dated 1827, now in Mrs. Potter Palmer's collection and on loan to the Chicago Art Institute.

An old confusion about the history of this picture can now, I believe, be cleared up. It is probably the one shown in the 1826 exhibition at Galerie Lebrun for the benefit of Greek relief, but not the one shown in the 1827 Salon under the title *Scène de la guerre actuelle entre les Turcs et les Grecs* as has been supposed by some writers. Following A. Moreau

(*E. Delacroix et son oeuvre*, Paris, 1873, p. 169) Robaut's catalogue identifies the Chicago *Giaour et Pacha* with the 1827 Salon *Scène de la guerre*. In 1916 Moreau-Nélaton proposed (*Delacroix raconté par lui-même*, Paris, 1916, I, pp. 84-85) that the Salon picture was another one, always known by the title under which it was exhibited (Robaut no. 200; Moreau-Nélaton, fig. 55), and which belonged in 1916 to a M. Sarlin. In 1926 Raymond Escholier (*Delacroix*, Paris, 1926-1929, I, p. 186 n. 2) cites a then unpublished letter from Delacroix to Pierret which refers presumably to the Chicago picture, giving its title as "*Combat du Giaour et du Pacha*—tiré de Lord Byron" for the "prochain Catalogue." Escholier dates this letter June 14, 1828, and implies that its message was intended, but was too late, for the second supplement of the 1827 Salon catalogue. André Joubin published the letter (*Correspondance Générale d'Eugène Delacroix*, Paris [cop. 1936-1938], I, p. 185) under its obviously correct date in context with other letters, June 14, 1826, and makes the point that the catalogue referred to was for the Greek exhibition at Galerie Lebrun. Jean Cassou perpetuates Escholier's error (*Delacroix*, Editions du Dimanche [Paris, 1947], caption for ill. 6), and I too have repeated it in *Eugène Delacroix*, Metropolitan Museum of Art Miniatures, Album MO, text referring to ill. 8. Cf. also G. H. Hamilton, "Delacroix, Byron

2. Copy after Caravaggio, *Crucifixion of St. Andrew*. Toledo, Museo Nacional

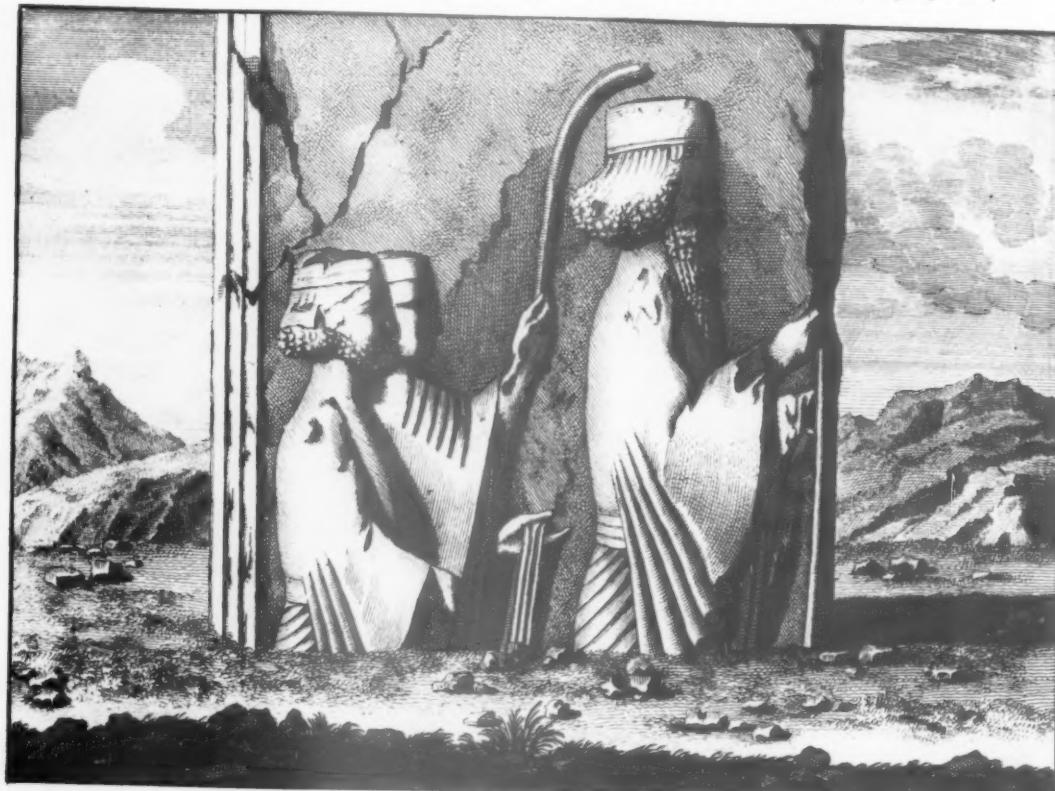


1. Michelangelo da Caravaggio, *Crucifixion of St. Andrew*. Vienna, Collection of the author





1. Delacroix, *La Mort de Sardanapale*, Paris, Louvre (photo: Archives Photographiques, Paris)



2. Achille Devéria, illustration for Byron's *Sardanapalus*, 1825

edged fascination with Byron, there can be little doubt that the poet led him to the Sardanapalus theme. Indeed, no room for doubt is left in the following passage from Baron Charles Rivet's reminiscences of Delacroix: "En lisant le drame assez peu lisible de lord Byron, il avait été frappé du côté pittoresque du dénouement. Un despote farouche et blasé qui s'ensévelit sous les débris de son palais, sacrifiant avec insouciance à son orgueil les objets de son affection, les instruments de ses plaisirs et les trésors de son luxe oriental; c'était une scène qui s'était d'abord présentée à son imagination, empreinte de deuil et d'horreur."<sup>4</sup> Rivet was a life-long friend of the painter, but wrote these reminiscences after Delacroix's death. Raymond Escholier, who quotes this passage in support of the Byronic source for the painting, adds in a footnote, "dans le drame de Sardanapale . . . l'esclave favorite dit simplement: 'Allume le bûcher!' et le rideau tombe. Ces seuls mots ont suffit à inspirer à Delacroix cette scène de volupté et de mort."<sup>5</sup> If Rivet found Byron's drama "peu lisible," Escholier and other writers have apparently found it so too. Any hardy reader will search the text in vain for the dénouement Rivet describes, and one must suppose that Escholier's checking of the text consisted in glancing at the last few lines, which I quote below in context.

Delacroix scholars have not taken into account the changes Byron made in adapting the ancient story. In the first English edition of the drama, the author informs his readers that his theme was drawn from a passage in Diodorus Siculus II which describes the dissolute life and spectacular death of the ancient Assyrian king. Sardanapalus is presented by the ancient historians<sup>6</sup> as a luxury-loving, thoroughly dissipated and ignoble personage whose life and death were equally cowardly and disgraceful, and who was responsible for the total destruction of the Assyrian empire.<sup>7</sup> The destruction of that empire by the Medes is given a legendary and personal justification by the ancient historians: Arabaces, governor of Media, enraged at the spectacle of the dissolute king whom he has seen with

his own eyes, forms a conspiracy with Beleses, governor of Babylon, to "free" the subject peoples from the dominion of Sardanapalus. The conspirators attack the kingdom and ultimately besiege the fortified palace at Nineveh. Sardanapalus gives up hope when a flood of the Euphrates (actually the Tigris) breaks down a section of the city wall, fulfilling an old prophecy that Nineveh could never be taken unless the river became its enemy. He thereupon prepares the famous destruction of himself and all his treasures, a spectacle described by Diodorus as follows: ". . . he built an enormous pyre in his palace, heaped upon it all his gold and silver as well as every article of the royal wardrobe, and then, shutting his concubines and eunuchs in the room which had been built in the middle of the pyre, he consigned both them and himself and his palace to the flames."<sup>8</sup> Athenaeus, though he does not recount the whole history, offers a few more details of this scene, notes that the fire burned for fifteen days, and ends his account thus: "And so Sardanapalus, after he had enjoyed pleasure in strange ways, died as nobly as he could."<sup>9</sup>

Byron managed to find in this tale material for a tragedy exemplifying the classical unities, and in his introduction makes it clear that he wished to teach a lesson in structure to the playwrights of his day who had, according to him, abandoned the rules of drama. He did not intend this play or any of the dramas for representation on the stage. He makes of Sardanapalus an eloquent spokesman for an epicurean view of life that prefers peace and pleasure to war and glory. The spokesman for the opposite view is the king's brother-in-law Salemenes, who wavers between loyalty to king and family and to a virile concept of bravery and proper royal conduct. At the showdown he joins the insurgent forces. The story follows the legendary outline, but the dénouement is a product of the Sardanapalus character Byron created—more or less, one feels, in his own image, or in justification of it. When the king sees that all is lost, he evacuates the queen, his children, and all his loyal retainers (who adore him), instructing them

and the English Illustrators," *Gazette des Beaux-Arts*, ser. 6, XXXVI, 1949, p. 263 and n. 4.

Delacroix's picture *Scène de la guerre . . .* was exhibited when the Salon opened in November of 1827, and is listed as no. 299 of the original catalogue. However, he did enter the Chicago picture later. The register of all pictures entered in the 1827 Salon, preserved in the Louvre library, lists among Delacroix's entries the following two: no. 1625, *Scène de la guerre des Turcs et des Grecs* (96cm x 112cm); and no. 2730, *Combat du Giaour et du Pacha dans un défilé* (80cm x 93cm). The dimensions given in the register for both pictures (and others as well) are somewhat larger than those of the pictures as they are catalogued elsewhere. One must assume that the Salon registrar included the frames in his measurements. no. 2730, the *Giaour et Pacha*, was entered together with the *Sardanapalus*, some months after the Salon opened, and it should be noted that the title needed no correction. Of the total of Delacroix's sixteen pictures entered in the register, only twelve were exhibited, or at least listed in the Salon catalogue and its supplements. Evidently the *Giaour et Pacha* was not hung. Thus I believe it can be said that both pictures always bore the titles Delacroix gave them, that Moreau-

Nélaton was right in supposing that the Chicago picture was not exhibited in the 1827 Salon, and that future cataloguing of both pictures should be altered in the light of this information.

4. [Piron], *Eugène Delacroix, sa vie, son œuvre*, Paris, Claye, 1865, p. 70.

5. Raymond Escholier, *Delacroix*, I, p. 222.

6. Diodorus Siculus ii. 23-27, and Athenaeus, *Deipnosophists* xii. 528-530. Both writers derive their material from the lost *Persica* of Ctesias.

7. The Sardanapalus of the ancient historians has been identified with Sin-shar-ishkun, last king of the Assyrian empire (cf. C. J. Gadd, *The Fall of Nineveh*, London, British Museum, 1923). The legend surrounding his death is probably the result of an ancient confusion between Sin-shar-ishkun and Shamash-shum-ukin, the rebel brother of Ashurbanipal, who died a death like that attributed to Sardanapalus (cf. A. T. Olmstead, *History of Assyria*, New York and London, 1923, p. 475).

8. Diodorus Siculus ii. 27, 2, Loeb edition, 1933, I, p. 441.

9. Athenaeus xii. 529, d, Loeb edition, 1933, V, p. 389.

to take with them all the treasures of the palace. His intention is to die alone, but his favorite concubine, the Ionian Myrrha, chooses to die with him in the name of true love, after having fought by his side in the battle.<sup>10</sup> On the signal indicating that the loyal servants are safely away from the palace, Sardanapalus mounts the pyre, which Myrrha then fires with a torch, saying, " 'Tis fired! I come." The last lines direct that "as Myrrha springs forward to throw herself into the flames, the curtain falls." This scene is represented in neoclassical style in the engraved illustration by Achille Devéria that accompanies the text in the *Lad-vocat* edition (Fig. 2). The plate is dated January 1825.

Professor Hamilton has pointed out<sup>11</sup> that Delacroix and Achille Devéria were friends at this time, and that there is every reason to suppose they discussed the illustrations Devéria was preparing. In view of Delacroix's subsequent treatment of the theme, one would give a good deal to know what he might have said about this plate. Hamilton in another article<sup>12</sup> calls attention to resemblances between various English illustrations of Byron and Delacroix's handling of the same subjects, with a couple of exceptions which include the Sardanapalus as represented by Cruikshank in 1825. Cruikshank evidently adhered to Byron's text as did Devéria, and Hamilton notes the discrepancy with Delacroix in Devéria's case also.<sup>13</sup>

Delacroix must certainly have looked into the classical source Byron used if he did not know it already. He preserved the treasures, slaves, and concubines that Byron removed from the final scene, and evidently preferred the proud and willful Sardanapalus of antiquity to the martyr of Byron. He goes even further than this, however. Neither in Byron nor in Diodorus' and Athenaeus' versions of the story is there any suggestion of the slaughter of the concubines depicted in the painting. This discrepancy at least has struck some scholars who have attempted to account for it. Jean Guiffrey states: "La légende et le poète faisaient périr Sardanapale, ses femmes, ses serviteurs et ses trésors sur un bûcher allumé sur l'ordre du tyran. Delacroix invente le massacre préalable."<sup>14</sup> Paul Jamot in the Louvre catalogue of 1929 goes to some length to account for the discrepancy on aesthetic grounds: "Le sujet était tiré d'une tragédie de Byron. . . . Plus la scène est confuse et doit l'être, plus nécessaire lui semble un point fixe qui serve de centre. Et c'est peut-être cette nécessité logique qui lui suggère de modifier les données du drame byronien. Les historiens grecs,

suivis par Byron, nous disent que Sardanapale périra, avec ses femmes, ses serviteurs et ses trésors, sur un bûcher qu'il avait fait allumer dans son palais. Delacroix, selon la juste remarque de M. Jean Guiffrey, 'invente le massacre préalable' . . . Grace à cette invention du massacre avant l'incendie, le sanguinum tumulte s'ordonne autour d'un centre immobile, l'impassibilité du roi s'opposant aux gestes violentes des femmes et de leurs bourreaux."<sup>15</sup>

It is unfortunate that Delacroix's *Journal* does not cover the year 1827—nor does his preserved correspondence from this period give us any clues to his sources for the Sardanapalus. One document, however, does appear to demonstrate that Delacroix did not invent the massacre. It is the description of the picture printed in the *Salon* catalogue, which must have been provided by the painter himself. The Sardanapalus was entered in the *Salon* in February of 1828, some months after the opening, and is listed in the second supplement to the catalogue as no. 1630, with the following description: "Les révoltés l'assiegèrent dans son palais. . . .

"Couché sur un lit superbe, au sommet d'un immense bûcher, Sardanapale donne l'ordre à ses eunuques et aux officiers du palais, d'égorger ses femmes, ses pages, jusqu'à ses chevaux et ses chiens favoris; aucun des objets qui avaient servi à ses plaisirs ne devait lui survivre . . . Aïscheh, femme bactrienne, ne voulut pas souffrir qu'un esclave lui donnât la mort, et se pendit elle-même aux colonnes qui supportaient la voûte . . . Baleah,<sup>16</sup> échanson de Sardanapale, mit enfin le feu au bûcher et s'y précipita lui-même."

This paragraph is presented as a quotation, the quotation marks and suspension dots being given in the printing. Is it possible that Delacroix is quoting himself? This text suggests rather a program synopsis for a contemporary play or opera, or a written account of some such presentation. Two characters are named: Baleah is the Balea of Byron, a name he presumably invented, as it does not occur in ancient versions of the story; therefore the quotation is probably from something written after publication of the play in 1821. Aïscheh the Bactrian woman and the action in which she is engaged are new to the Sardanapalus story, as far as I can determine. Possibly the name is derived from Ayesha, the last and favorite wife of Mohammed.<sup>17</sup>

A search through the appropriate years in the *Almanach des Spectacles*, which lists titles, authors, and composers for all theatrical productions in Paris from 1821 through 1836,<sup>18</sup> yields no play or opera dealing

10. The lines describing Myrrha in the battle (Act III, ll. 387ff.) are extremely suggestive as a source of Delacroix's figure of Liberty in *Liberty Leading the People* of 1831.

11. *Op.cit.*, p. 110.

12. "Delacroix, Byron and the English Illustrators," *Gazette des Beaux-Arts*, ser. 6, XXXVI, 1949, pp. 261-278.

13. *Ibid.*, pp. 271-272.

14. Jean Guiffrey, "La Mort de Sardanapale," *Gazette des Beaux-Arts*, ser. 5, LXIII, 1921, p. 196.

15. *La peinture au Musée du Louvre*, 1, XIX siècle, 2e partie, p. 15.

16. This name is transcribed incorrectly as *Balsah* in Guiffrey, *loc.cit.*, and in *Escholier, op.cit.*, 1, p. 217.

17. The only *Sardanapalus* I have found between antiquity and Byron is a play of this title by Daniel Lingelbach published in Amsterdam in 1699. Its cast does not include Balea or Aïscheh, but does follow the classical names.

18. *Almanach des Spectacles*, Paris, J. N. Barba, ed., 1822-1837. Each volume covers events in the year preceding date of volume. This series is one of several under this or similar titles, covering various periods in the eighteenth and nineteenth centuries.

with the Sardanapalus story, at least by title. Perhaps the London summer season of 1825 (when Delacroix was there) might reveal a clue. It is of course possible that such a play existed but was never produced. Byron seems to have inspired later dramatists, however. A Sardanapalus tragedy in five acts by Lefèvre was performed at the Théâtre Français in 1844, a burlesque of the story in London in 1853, and an opera by Henri Becque (libretto) and Victorin de Joncières (score) was given at the Théâtre-Lyrique in Paris in 1867. None of these versions contains a character named Aïscheh, but all use the Byronic and the ancient names, and follow Byron's version of the story. From the early eighteenth century on there is a theatrical preoccupation with themes from both the ancient and the Islamic Near East, with a definite concentration after 1800. Semiramis was a favorite figure, treated by Voltaire in 1748 and reappearing frequently. Artaxerxes, Cyrus, Ninus II, and *La Princesse de Babylone* are among others. Even melodrama drew on such themes—in 1824 the Théâtre de la Gaité presented *Les Ruines de Babylone*.

Short of exhaustive research in theatrical archives, it seems reasonable to suppose that Delacroix found in the contemporary theater the romantic extremity that Byron and the ancient historians seemed to him to lack. His theater- and opera-going were proverbial, and his work abounds in literary subjects that he might easily have seen as well as read. We have the example from later in his career of *Desdemona at her Father's Feet*—a scene that does not occur in Shakespeare's *Othello*, but comes from Rossini's opera.<sup>19</sup> Walter Friedlaender senses something of this kind in the *Execution of Marino Faliero*, a painting also shown in the 1827 Salon. Of it he says, "the effect of the picture is too illustrative . . . perhaps it is still too much under the influence of the stage setting of a Byronic drama."<sup>20</sup> Professor Friedlaender also notes the theatrical inspiration behind the *Phaedra and Hippolytus* of Guérin, Delacroix's teacher,<sup>21</sup> and there is of course much other evidence of a long tradition of relationship between painting and the theater in France. Finally, from Delacroix himself we have the following invocation inspired by the subject matter of Courbet: "Oh! Semiramis! . . . Oh! entrée des prêtres pour couronner

Ninias!"<sup>22</sup> The last half of this remark is surely a recollection of stage action.

From the point of view of the story itself, a massacre of the concubines would present a good theatrical expedient for providing a tumultuous finale without exposing the stage to a risk of fire. In fact, Victor Hugo regretted Delacroix's suppression of the fire in a defense of the picture, saying, "cette belle scène serait bien plus belle encore si elle avait pour base une corbeille de flammes."<sup>23</sup> The popular notion of the barbaric massacre of slaves and concubines on the occasion of a king's death could have had its origin in Herodotus' description of a royal Scythian burial,<sup>24</sup> since confirmed by archaeological evidence.<sup>25</sup> Romantic exploitation of such a tradition need hardly be remarked, and its appeal for Delacroix should have been automatic. One is forced, however, into the speculative position of Guiffrey and Jamot in attributing to Delacroix's invention the improbable confusion of space and movement (noted by critics of the picture at the time), and the voluptuous nudity of the women.

While it may be disappointing to think of this work as depending upon a second- or third-rate unknown playwright, it must be conceded that Delacroix's art frequently surpassed his material. Nevertheless, the picture was not very successful, and Delacroix himself spoke of it with reservations in later years.<sup>26</sup> The critical response to the Sardanapalus in 1828 was about the worst Delacroix ever received, and for the first time a major Salon picture was not purchased by the state. The work marks a crucial point in his career, an attack with the full battery of the romantic artillery—pathos, sensuality, turbulence, orientalism, and the most brilliant range of color he ever used in a major painting. After it came a certain retrenchment and consolidation that mark a more mature phase of his early production, culminating in the great *Liberty Leading the People* of 1831.

## II

The orientalism of the Sardanapalus presents another problem of sources that has little bearing on the previously discussed literary problem. But the solution of it, like that of the other, provides further evidence of the painter's restless search for romantic stimulants. It is perhaps conceivable that whatever theatrical pro-

she went out into the stables and laid low the horses that were therein. And when she had made the place a desert unto the Iranians, she returned unto the feet of her son, and pierced her body with a sword."

Firdausi was first translated by the English in 1785. Partial translations appeared in French in 1788 and 1810, and a definitive complete translation in seven volumes (J. Mohl, *Le livre des rois par Abou'lkasim Firdousi*, Paris, Imprimerie Royale) was published from 1838-1878. This work was conceivably in preparation when Delacroix made his painting.

For the time being I must leave to others the question of whether the Sardanapalus legend has come down in Oriental literature independent of Ctesias, and turned up in a form that Delacroix could have seen.

26. See Rivet's reminiscences as quoted in Escholier, *op.cit.*, p. 224.

19. Jean Cassou, *Delacroix*, caption for ill. 28.

20. *David to Delacroix*, Cambridge (Mass.), 1952, p. 116.

21. *Ibid.*, p. 45.

22. *Journal*, April 15, 1853.

23. Escholier, *Delacroix*, 1, p. 192, quoting from Victor Hugo, *Correspondance*.

24. Book IV, chs. 71-72.

25. It has been called to my attention by Mr. John Haskins that the massacre has an oriental, perhaps Persian, flavor. A scanning of an abridged *Shah-Nama* of Firdausi yields little except the following, from "Firoud" in Helen Zimmerman's translation, *The Epic of Kings*, London, 1882, p. 234: Firoud, capitulating to a siege of invading Iranians, instructs his mother to take all the women of the castle to the abyss and cast themselves over. All did this, except the mother, who "made a great fire, and threw therein all his treasures, and

duction Delacroix saw furnished him with some of the Near Eastern setting and accessories he provided in the painting. However, it is likely that Devéria's illustration reflects more faithfully how a stage presentation of the time would have been mounted—namely, neoclassical costumes and setting for a theme from the classical historians.<sup>27</sup>

We know from the *Journal* that when Delacroix was at work on the *Massacre at Scio* he found in the possession of the painter Jules-Robert Auguste a highly usable collection of costumes, arms, and other tourist trophies that that gentleman had gathered on a tour around the Mediterranean. However, as Jean Guiffrey has already pointed out,<sup>28</sup> and as anyone might realize, there were no remains or artifacts from the ancient Assyrian empire above ground in 1827. The first excavations at the site of ancient Nineveh were carried out in 1843 by Paul Emile Botta, a French consular agent.<sup>29</sup> Layard followed in 1845. (It is appropriate to recall that Lefèvre's drama revived the Sardanapalus story in 1844.) And yet Delacroix's embattled ramparts strangely resemble later reconstructions of Assyrian ruins. With correct antiquarianism the painter also gives the king a long beard and the most prominent servant a short one—this despite the ancient historians' reports that Sardanapalus shaved clean and painted his face like a woman. The "oriental" types of his heads are seen already in the *Massacre at Scio* and even in Gros' *Napoleon among the Plague-Stricken at Jaffa*, but it is tempting to observe that in 1825 Delacroix made the beautiful lithographs of antique coins from the collections of his friends the Duke of Blacas and Baron Schwiter. Some of these coins are Graeco-Persian, and the heads, romanticized by the painter to be sure, bear a certain resemblance to types in the Sardanapalus.<sup>30</sup> Much of the treasure, equipment, and horse trappings is drawn from Islamic decorative art, mingled with suggestions of classical and Egyptian antiquity.

The most obvious ancient Near Eastern ruins that had stood above ground from antiquity on were the remains of Persepolis. It is therefore intriguing to find that on the back of one of Delacroix's preparatory sketches for the Sardanapalus<sup>31</sup> he made the following note to himself:

Peintures licencieuses de Delhi, de Leblond:

Pour les têtes des hommes.

—Peintures persépolitaines.

27. However, in 1815 Schinkel designed sets for Mozart's *Magic Flute* for the Vienna Opera, based on Egyptian archaeological material.

28. *Op.cit.*, p. 200.

29. For a short account of the history of Assyriology and European preoccupation with the area in the romantic period, see Edith Porada, "The Assyrians in the Last Hundred Years," *Metropolitan Museum Bulletin*, n.s., IV, 1945-1946, pp. 38-48. I owe to Dr. Porada very valuable leads and helpful discussion on all aspects of the relation of Delacroix's *Sardanapalus* to the field of Near Eastern archaeology.

30. See Edith Porada, "Erich F. Schmidt, *Persepolis*, vol. 1:

- étrusques de toute façons.
- les farouches Ethéopiens.
- faire une tête d'homme avec une tête de chameau.
- têtes de marabouts
- têtes d'Africains.
- têtes de Nubiens.
- croquis exagérés d'après le nègre.
- crocodile colossal.<sup>32</sup>

What kind of visual information might Delacroix have had about Persepolis? Until scientific excavations began, most such information was purely descriptive, and came to western Europe in the form of travel books and diaries, often illustrated with engravings. One of the most fruitful of these, with relation to Delacroix's *Sardanapalus*, is the *Voyages de Corneille Le Brun* [Cornelis de Bruyn] *par la Moscovie, la Perse, et les Indes Orientales*, published in Amsterdam in 1718, and illustrated with engravings after drawings made from nature by the author.<sup>33</sup> De Bruyn provides in this book an exhaustive coverage of the ruins at Persepolis, with many plates of architectural and sculptural monuments and fragments, and details of decoration. Several reliefs present fine examples of the social distinctions in tonsorial style at the Persian court (Fig. 3). A relief from one of the royal tombs shows a large piece of furniture used (out of scale) as the pedestal for a sacrificial scene (Fig. 4). This object is the frame of a chair or bed, with lions' heads at the corners. One thinks immediately of the couch of Sardanapalus with its large elephant-head mounts. De Bruyn in his text includes remarks on bravery represented by lions in the Persian decorations. Did Delacroix perhaps consider that lion mounts would be inappropriate for Sardanapalus? The elephant is not an animal customarily found in ancient Near Eastern decoration, but is associated with further Asia. Diodorus, in his history of the Assyrian empire, recounts the unsuccessful stratagem of dummy elephants employed by Queen Semiramis in her ill-fated invasion of India, a passage we may imagine Delacroix had absorbed. The frontispiece of de Bruyn's *Voyages* of 1718 (Fig. 5) represents a flamboyant allegory of discovery in which father time draws back a curtain, revealing a mélange of motifs: Persian ruins, figures in exotic costume, a camel, and a buxom Negress leading an elephant by the trunk—all presided over by a flying *Fama* with trumpet and laurel wreath. The conventions of the elephant's head are strikingly similar to

Structures, Reliefs, Inscriptions" (book review), *Artibus Asiae*, XVIII, no. 2, 1955, p. 216 n. 1.

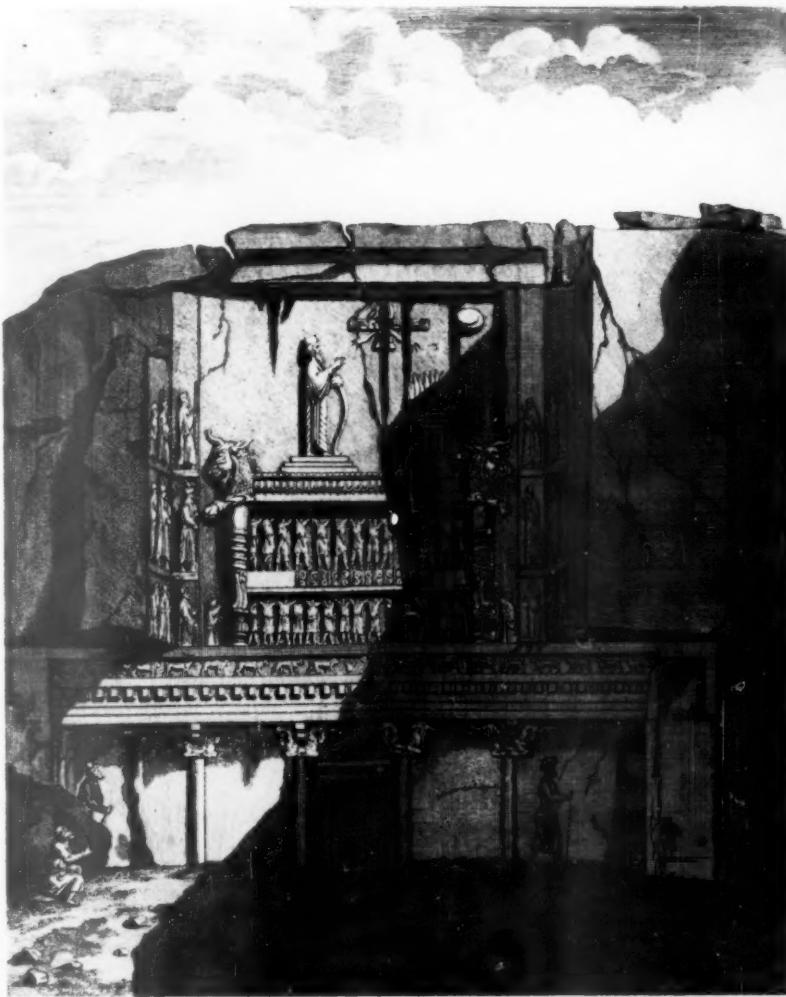
31. Louvre, no. 5278.

32. Escholier, *op.cit.*, I, p. 226.

33. I owe this reference to Dr. Porada, who has since published it to the same effect in *Artibus Asiae*, loc.cit. De Bruyn, a Dutch gentleman traveler, also published a book called *Voyage au Levant . . . dans les principaux endroits de l'Asie Mineure, dans les Isles de Chio, Rhodes, de Chypre . . . d'Egypte, de Syrie et de la Terre Sainte* (Delft, 1700). Conceivably Delacroix consulted this or some such volume when working on the *Massacre at Scio*.



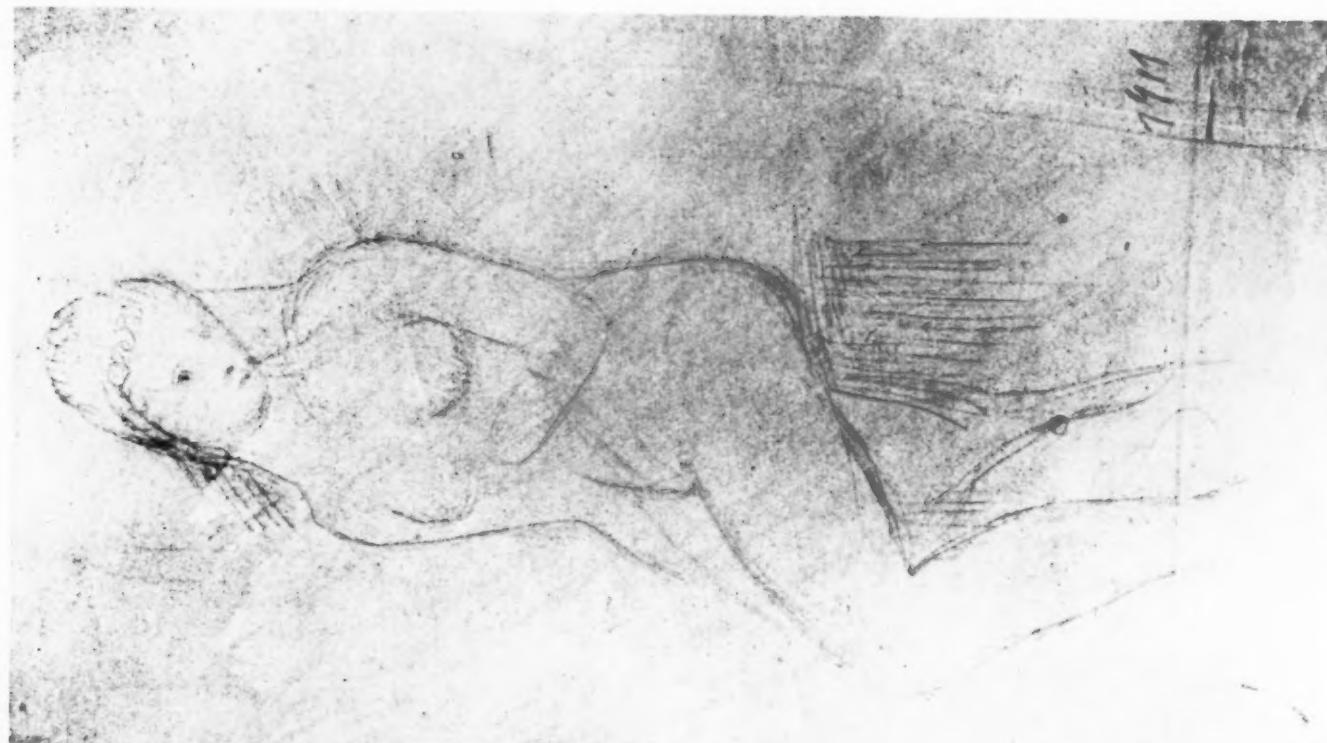
3. Pilaster of a portico, Persepolis (From Cornelis de Bruyn, *Voyages*, 1718, II, fig. 148)



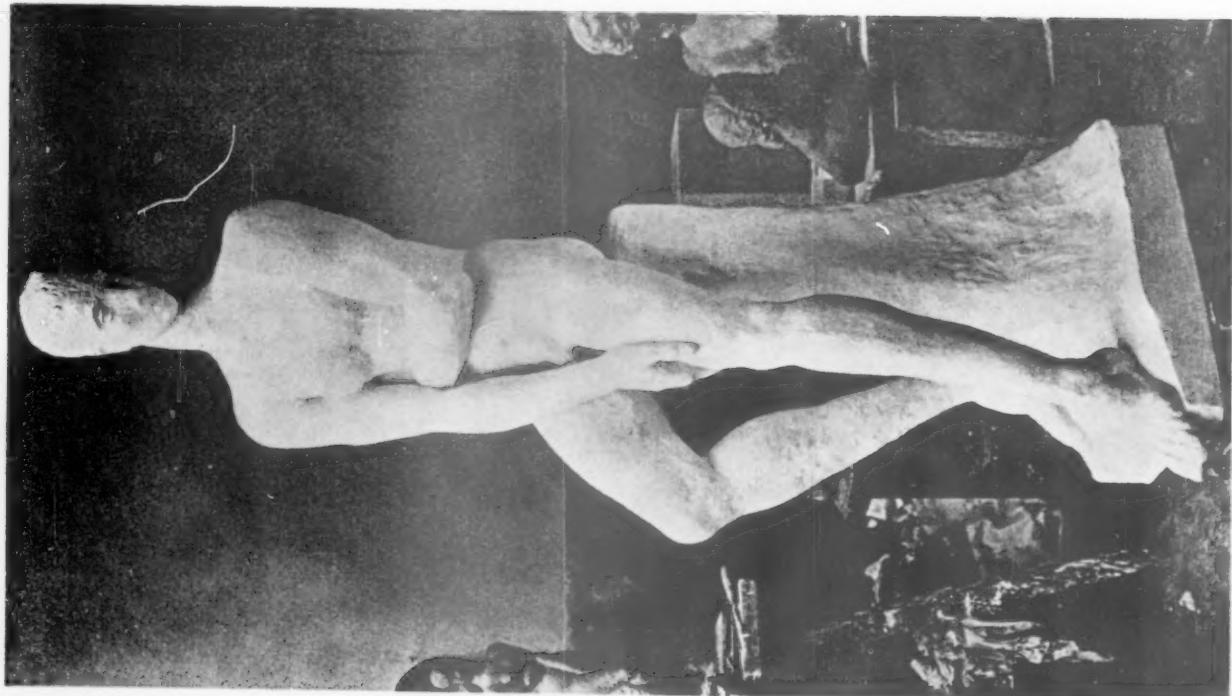
4. Royal tomb, Persepolis (From Cornelis de Bruyn, *Voyages*, 1718, II, fig. 158)



5. Frontispiece (From Cornelis de Bruyn, *Voyages*, 1718, I)



3. Lehmbruck, Drawing of Girl Walking, 1913 or 1914



1. Lehmbruck's Paris Studio in 1914



2. Lehmbruck, Drawing of Girl Walking, 1911

those of Delacroix's decoration on the couch of Sardanapalus.

While there is nothing conclusive about this particular piece of evidence, the general style and subject matter of de Bruyn's travel books make attractive the hypothesis that Delacroix availed himself of these or similar materials in his search for what might be called exotic truth. He moved in social circles where fine libraries and cabinets were available to him, and there is evidence of his borrowing from engravings in other works throughout his career.<sup>34</sup> The old travel books are full of suggestive material. De Bruyn, for example, in his section on the East Indies, presents a picture of "poissons singuliers"<sup>35</sup>—a still life composed in a manner extremely reminiscent of the large outdoor still life Delacroix painted in 1826 for his friend the General Coëtlosquet, now in the Louvre.

Delacroix was attacked for the confusion of space and forms in his Sardanapalus, a factor contributed to not a little by the ambiguity between indoors and outdoors. This is perhaps explainable if one imagines he studied the structure of Persepolitan royal residences. The many-columned halls open to the air on one or more sides were evidently what he had in mind for the palace at Nineveh. His capitals (only dimly visible in reproduction) are a curious synthesis. At first glance they appear to have nothing to do with the characteristic double-bull-headed Persian capitals. They consist of a bulbous expansion near the top of the column, with a return to the normal diameter just before joining the ceiling, and do not appear to offer support for the noose with which Aïscheh hangs herself. Capitals of almost exactly this form are to be found in the cavern temple at Elephanta, which was a considerable tourist attraction for western, chiefly English, visitors and colonists in India in the late eighteenth and early nineteenth centuries.<sup>36</sup> In 1819 a book by Sir William Ouseley was published in London with the title *Travels in various countries of the East; more particularly Persia*. The cave temple at Elephanta appears in a large engraving<sup>37</sup> in this work, which is of the sort I imagine Delacroix consulted. On examining the capitals in the original painting with the help of low-powered binoculars, I discern on the capital farthest to the right a carved projection that appears to be a man-faced lion head, facing in the direction of the fortifications and above them on the picture plane. If this decoration had a counterpart on the near side of the capital, it would not only provide a support for Aïscheh's noose, but would bring the capital back to a quasi-Persian form. The murky darkness at the top

center of the picture does not reveal a clue of this to the observer.

The distant crenellated ramparts of Delacroix's Assyrian city wall that recall reconstructions of ancient Near Eastern palaces are found in the travel books too. Most of them are mediaeval and later fortifications that are a commonplace of eastern Mediterranean towns—but they give character to the unhistorical concept of palace-city architecture one would necessarily have from this sort of armchair traveling. We may justifiably recall Delacroix's strong impression of antiquity in the experience of Algiers and Morocco in 1832. In the presence of the Algerian harem he exclaimed, "C'est beau! C'est comme au temps d'Homère!"<sup>38</sup>

The general character of Delacroix's working methods, though perhaps not investigated in detail, is fairly well understood through evidence we already have from the *Journal* and other sources. I do not know how fruitful the further pursuit of such evidence would be, beyond the uncovering of more examples of the kind presented in this study. The chief interest in this material perhaps lies in its confirmation of the relation of Delacroix's work to the academic tradition. Is not this combination of literature, theater, and detailed archaeology the same formula as that followed by David in painting the *Horatii*? Delacroix was the last great painter before Picasso both capable of and interested in investing human action with convincing magnificence. Later nineteenth-century attempts at it are self-conscious and without true dignity. Though their subject matter and style are romantic instead of neoclassical, the *Death of Sardanapalus* and the other "history" paintings of Delacroix are the final flower of the *grand maniére*.

METROPOLITAN MUSEUM OF ART

#### WILHELM LEHMBRUCK'S WALKING GIRL

JOHN COOLIDGE

From June 20 to June 30, 1914, the Galerie Levesque in Paris gave Wilhelm Lehmbruck his first one-man show. It was an unprecedented honor. At that time in France a lucky foreign artist could hope to have one or two of his works accepted for the Salon or for other group displays, but if he wished to exhibit more he had to hire the quarters for himself.<sup>1</sup> Yet for Lehmbruck Levesque presented to the public forty prints, nine paintings, and eighteen statues, issuing an illustrated catalogue with an ecstatic introduction by André Salmon.<sup>2</sup>

37. 1, pl. v.

38. Escholier, *op.cit.*, II, p. 87.

1. O. Grautoff in *Cicerone*, VI, 1914, pp. 539ff., and G. Au-Beck, "Wilhelm Lehmbruck," *Plastik*, IV, 1914, pp. 58-60.

2. *Exposition des Oeuvres de Wilhelm Lehmbruck*, préface par André Salmon, Galerie Levesque et Cie. 109 Faubourg Saint-Honoré, Paris. 20 au 30 Juin 1914. There is a copy of this pamphlet in the Library of the Fogg Art Museum.

34. In addition to Hamilton's article on the subject cited above (n. 12), see A. Linzeler, "Une source d'inspiration inconnue d'Eugène Delacroix," *Gazette des Beaux-Arts*, ser. 6, IX, 1933, pp. 309-312.

35. II, pl. 205, opp. p. 344.

36. See Rose Macaulay, *Pleasure of Ruins*, London, 1953, pp. 385-386. Pl. 45 reproduces an interior view of the temple in an aquatint by Thomas Daniell of 1799. At the boat landing there was a colossal elephant head, which gave the island its European name.

The individual sculptures were listed in the catalogue with titles in French and the pieces can be identified with some assurance.<sup>3</sup> The group included all but three of the most important statues Lehmbruck had produced during his four and a half years in the French capital.<sup>4</sup> No. 14 was called *Jeune Fille Marchant* and seems to have been the statuette which appears in the background of a photograph showing Lehmbruck's studio in 1914 (Fig. 1).<sup>5</sup> Shortly after the exhibition closed, World War I forced Lehmbruck to leave Paris. In the hurry of departure the unique example of this figure was lost.<sup>6</sup> It is not reproduced elsewhere, nor is it included in any other listing of Lehmbruck's work. Yet it gives a valuable insight into his development as an artist.

During his years in Paris Lehmbruck executed three distinct series of single nude statues, as well as a small number of reliefs, portrait busts, and other sculptures. The first statue in the first series was his first great achievement after leaving Düsseldorf, the *Standing Woman* of 1910. Having created this figure, he isolated excerpts and studied them as independent works. Thus, later in 1910, the *Torso* and the *Head of the Standing Woman* appeared as separate pieces. Then he developed these excerpts introducing more movement,

as in the bust of *Frau Lehmbruck* of 1910 and the *Torso* of 1910-1911. Finally he rounded out the series with a new version of the whole, the *Small Meditating Girl* of 1911.

Logically, the next step in this evolution would be the statuette of the *Walking Girl*. A dated drawing shows that he had conceived the figure in virtually its final form as early as 1911 (Fig. 2).<sup>7</sup> Actually Lehmbruck seems to have stopped at this point and turned his attention to another type of nude figure. In 1908 Lehmbruck had entered a female figure with her arm bent in a competition for the decoration of a warehouse designed by Olbricht.<sup>8</sup> Two years later he carried the idea further in the statuette *Girl with her Leg Bent*. From these tentative beginnings Lehmbruck evolved in 1911 the *Kneeling Girl*, the outstanding statue in his second Parisian series of nudes.<sup>9</sup> But the completion of this masterpiece was followed by a break in Lehmbruck's life. He spent much of the year 1912 in travel and seems to have abandoned sculpture temporarily.<sup>10</sup>

The year off brought radical changes in his style. He now seems to have broken free from Maillol's influence.<sup>11</sup> Renewed contact with Italian painting, fresh

3. 1. Jeune Femme. Plâtre. Stehende weibliche Figur, 1910; 2. Torse de Femme. Bronze. Büste Frau L., 1910; 3. Femme Méditant. Bronze. Kleine Sinnende, Statuette, 1911; 4. Enfant Assis. Plâtre. Sitzender Knabe, 1910; 5. Buste de Femme. Pierre. Weibliche Figur, 1910. Torso, or Büste Frau N., 1910, or (probably) Weiblicher Torso, 1910/11; 6. Tête de Jeune Femme. Bronze. Gesenkter Frauenkopf, 1910; 7. Relief. Terre cuite. Plakette zu einer goldenen Hochzeit, 1911 (unlikely), or Versuchung, 1911, or (probably) Drei Frauen, 1914; 8. Jeune Fille Assise. Bronze. Sitzendes Mädchen, 1913/14; 9. Femme à Gehoux. Plâtre. Die Kniende, 1911; 10. Fragment. Pierre. (probably) Skizze zur Rückblickenden; 11. Jeune Fille Debout. Plâtre. Sinnende, 1913/14; 12. Baigneuse. Pierre. Badende, 1914; 13. Jeune Femme se Retournant. Pierre. Mädchentorso sich umwendend, 1913/14; 14. Jeune Fille Marchant. Pierre; 15. Homme Assis. Pierre. Männliche Figur, 1914; 16. La Réveuse. Pierre. Weibliche Figur, 1914; 17. Buste de Femme. Bronze. Several possibilities but probably Geneigter Frauenkopf, 1911; 18. Tête de Jeune Fille. Bronze. Mädchenkopf sich umwendend, 1913/14 or (probably) Mädchenkopf auf schlankem Hals, 1913/14. The titles as given above are from the catalogue and from August Hoff, *Wilhelm Lehmbruck, seine Sendung und seine Werk*, Berlin, 1936 (cited as Hoff, *Lehmbruck*).

4. Omitted were: either the *Versuchung* or the *Drei Frauen*, depending on the identity of no. 7 in note above; the *Emporsteigender Jüngling*, 1913, and *Jüngling*, 1914. I have no way of knowing how important was the last-named piece.

5. Reproduced in Hoff, *Lehmbruck*, p. 55. Apparently the original photograph has disappeared. See next note.

6. Professor Dr. August Hoff has kindly permitted the following quotation from a letter to the author, dated October 16, 1956: "Heute bekam ich einen Brief von dem jüngsten Sohn von Lehmbruck, der mir mitteilt, dass Frau Lehmbruck sich sehr gut an die Figur des schreitenden Mädchens auf der Abbildung Seite 55 meine Monographie erinnert. Die Abbildung zeigt ein Tonmodell, das 1914 in den Monaten vor Kriegsausbruch entstand. Durch die damalige schnelle Abreise aus Paris ging dann diese Figur verloren. Auch eine andere Abbildung ist nicht vorhanden. Leider habe ich auch das Foto nicht mehr, nach dem die Abbildung Seite 55 gemacht wurde."

7. Hoff, *Lehmbruck*, p. 87.

8. Paul Westheim, *Wilhelm Lehmbruck*, Potsdam, 1922, p. 29, and August Hoff, *Wilhelm Lehmbruck*, Berlin, 1933, p. 4.

9. Meier-Graefe, who discovered Lehmbruck, emphasized the contrast between the *Standing Woman* of 1910 and the *Kneeling Girl* of 1911 in an article in the *Frankfurter Zeitung*, May 1, 1932, no. 9-11, p. 9, reprinted in the catalogues of the Memorial exhibitions at Tübingen, 1948, and Mannheim-Düsseldorf, 1949. All other scholars have agreed. The contrast is certainly there and marks a major turn in Lehmbruck's evolution as a sculptor. But the *Kneeling Girl* is not, perhaps, quite such a startling and unprecedented creation as Meier-Graefe implied. Lehmbruck's early prints show two distinct types of female figure, a robust type, strongly influenced by Maillol (for example the *Frau und Kind des Künstlers* and the *Weiblicher Halbakt mit Männerköpfchen*) and a wan, tubercular type (for example the *Schüchternes Mädchen*, the *Mädchenkopf von vorn mit Tuch* and the *Kniende Gross*). Until more is known about Lehmbruck's work in Düsseldorf one cannot state dogmatically that one type succeeds the other, or estimate the importance of such a chronological relationship if it exists. It seems probable that Lehmbruck's very attraction to the "Classic" art of Marées and Maillol quickly aroused a counterattraction to "Gothic" traits. Certainly by 1911 both tendencies existed simultaneously in the artist's mind and both were finding expression.

10. Hoff, *Lehmbruck*, lists only one statue under the year 1912, and this was unfinished: *Kopf eines Knaben* O.

11. There has been a great deal of loose writing about the influence of other artists on Lehmbruck. He was not bashful about copying their work, and this can provide an index of what interested him and when. For example, the *Female Figure* of 1908 was probably inspired by some such Maillol statue as the *Bather Standing* of ca. 1900 (reproduced on p. 21 of John Rewald, *Maillol*, New York, 1939). This was known in Germany early in the century (cf. K. E. Osthaus, *Van de Velde*, Hagen, 1920, p. 44). The *Standing Woman* of 1910 does derive from Maillol; indeed the pose is similar to that of a Maillol statuette (cf. p. 135 of Rewald, *op.cit.*). The relation is even closer to a statuette illustrated on p. 18. But since the latter is dated ca. 1914 it probably reflects Lehmbruck's influence on Maillol. The print *Weiblicher*

perceptions of Egyptian sculpture, and the work of George Minne, all these provided suggestions to be taken up later. The paintings, drawings, and prints of 1912 show him seething with ideas out of which three stylistic characteristics emerged when he took up sculpture again on his return to Paris. Two of these were contradictory. There is on the one hand a tendency towards monumentality which requires a greater rigidity of pose, and on the other a tendency towards more violent action. The *Kneeling Girl* had two important progeny, the *Young Man Stepping Up* and the *Seated Girl*. Each exemplifies one of the opposing tendencies. Neither makes vivid the third stylistic trait. After 1912 the forms Lehmbruck used were less naturalistic and more abstract; his statues reveal a growing delight in smooth surfaces.<sup>12</sup>

The *Kneeling Girl*, her antecedents and her family comprise the second series of nudes. They are an intrusion into Lehmbruck's work as a sculptor. Shortly after his return to Paris he picked up the main line of his development, reverting to the theme of the *Walking Girl* where he had left it as shown in the drawing of 1911 (Fig. 2). From this idea he developed his third series of nudes. It was the point of departure for most of his work in 1913 and 1914, just as the *Standing Woman* had been the point of departure for most of his work during the first half of his stay in Paris.

A drawing of 1913 (Fig. 3) shows the pose virtually unchanged, but the rapid, strongly emphasized outlines reveal that Lehmbruck was thinking in terms of smooth, quasi-geometric forms.<sup>13</sup> The statuette itself is said to have been executed in 1914 and must have been even more schematic.<sup>14</sup> The *Male Figure* for the Cologne Exhibition is a more monumental and more rigid version of the theme. The same is true of the *Large Girl Meditating*, although her arms meet behind the body instead of in front. The various versions of the *Young Girl Turning* are more active variants.<sup>15</sup>

*Halbakt mit Männerköpfchen* must have been inspired by *Action in Chains*, the Blanqui monument. There are not many other instances as specific as these. Maillol's influence, like that of Hans von Marées, helped Lehmbruck break away (temporarily) from Rodin. But whereas Marées' influence endured, Maillol's seems to have been transitory and did not extend much beyond 1911.

12. A parallel development takes place in Lehmbruck's graphic work. Many of the prints and drawings of 1913 and 1914 show a fascination with outline for its own sake. They contrast with graphic works of 1910 and 1911 where outline may be used to suggest three-dimensional form or a psychological state. Contrast the *Kniende auf beidem Knie* of 1914 (reproduced in the *Magazine of Art*, 38, p. 304, December 1945) with the *Kniende* of 1911 (reproduced as fig. 71 in Paul Westheim, *op.cit.*), or with *Der Pilger* of 1911 (reproduced in Hoff, *op.cit.*, p. 83).

13. Reproduced on p. 9 of Eduard Trier, *Wilhelm Lehmbruck Zeichnungen und Radierungen*, Munich, 1955. For date, see *ibid.* under *Bilderverzeichnis* at the back.

14. See letter quoted in note 6.

15. Hoff, *op.cit.*, lists a *Mädchen sich umwendend*, 123 cm high. This seems to be the same piece that was exhibited at Hanover by the Kestner-Gesellschaft in 1955 (see Catalogue). Another cast, though slightly different, was bought by the

In them the head is more sharply twisted, and one thigh more vigorously raised. The *Bather* of 1914, the sketch for the *Girl Looking Back* and the final statue are likewise derived from the *Walking Girl*.<sup>16</sup> The forms in all these works are highly schematic.<sup>17</sup> Indeed in the *Girl Looking Back* the masses are more consistently rounded and the surfaces more polished than in any other work by Lehmbruck.

Evidently the theme of the *Walking Girl* had great importance in the evolution of Lehmbruck's style. It is significant that the central piece was never executed at larger scale. This marks a stage in the development of the artist's method of work. Except for some portrait busts, most of the statues Lehmbruck executed during his years in Düsseldorf were full-length figures. After he moved to Paris, he began with the complete figure and then developed the excerpts taken from it. In the case of the *Standing Woman* of 1910, all the later variants are minor works compared to the original figure. But the variants and derivatives of the *Walking Girl* are more important than the statuette itself. Although this modest piece inspired, it did not dominate Lehmbruck's production during his last Parisian years. At the end of his life his working procedure evolved yet a further step. His last statues, though fragments, were neither excerpted from nor evolved out of full-length figures. The *Thinker*, the late *Mother and Child*, the *Loving Couple* and the *Woman Praying* were conceived from the start in their final, truncated forms.<sup>18</sup>

Perhaps Lehmbruck's statuette will someday reappear. Such an appealing work of art is well worth a search, and at least two of his other statues were rediscovered after languishing for years in storage. Meanwhile the *Walking Girl* is interesting to art historians as a missing link in the taut chain of the sculptor's development. Also the relation between it and its derivatives makes clear how the artist's working procedure evolved.

#### FOGG MUSEUM OF ART

Berne Kunstmuseum (see *Das Werk*, 39, 1952, p. 305). Hoff also lists and illustrates (p. 47) a *Mädchen torso sich umwendend*, 96.5 cm high. He illustrates (p. 40) but does not list a *Mädchen torso* (in fact "sich umwendend"). This is perhaps identical with a figure of this title, 109 cm high that was exhibited at Düsseldorf and Mannheim in 1949 (see Catalogue). Westheim (*op.cit.*, fig. 40) illustrates a *Weiblicher Torso* that differs only slightly from the two illustrated by Hoff.

16. The *Badende* of 1914 is similar to *Susanna* of 1913 (reproduced as fig. 62 in Westheim, *op.cit.*). Thus Lehmbruck the sculptor of the *Walking Girl* inspired Lehmbruck the painter.

17. It would be interesting to know what relation, if any, the *Weibliche Figur* of 1914 and the *Jüngling* of the same year had to the *Walking Girl*. Unfortunately both of these works have been destroyed and apparently no visual record has survived of either.

18. Lehmbruck made half-length studies of heads in drawings and prints from at least as early as 1911. However, after his second trip to Italy in 1912 he takes up this genre in a series of paintings. The late statues develop directly out of this enthusiasm. For example, a drawing of 1916, *Schwester und Kranker* (reproduced in Trier, *op.cit.*, pl. 23) is the origin of the late sculpture *Liebende* (*Köpfe*).



## BOOK REVIEWS

PAUL FRANKL, *Peter Hemmel, Glasmaler von Andlau*, Berlin, Deutscher Verein für Kunsthistorische Wissenschaft, 1956. Pp. 142; 229 pls. DM 70.00.

One of the richest yet most neglected fields of the history of Mediaeval art is that of stained glass. The new *Corpus Vitrearum Medii Aevi* should stimulate interest in the subject and will make available hitherto unpublished examples, but its projected volumes are concerned with specific national areas or periods. In no case in recent art historical literature has an entire monograph been devoted to an artist working exclusively in glass. Paul Frankl's volume on the work and personality of the glass painter Peter Hemmel, therefore, is not only unique in modern studies but also will remind other interested scholars of the possibilities of this approach. Drawing upon his vast general knowledge of the field, his specific studies in German glass, and his own earlier work on Hemmel, Dr. Frankl has produced a work the scope and thoroughness of which may well serve as a model for future scholars.

The volume is abundantly illustrated by 22 text plates in addition to the 229 photographs of the artist's work. These illustrations include the author's reconstructions of windows by Hemmel and his associates, individual panels, and details. Unlike many of the other arts, stained glass, particularly the large windows of the late Gothic period, is all but impossible to study *in situ*. Therefore, the excellent quality of most of these plates contributes enormously to the reader's understanding of Hemmel's remarkable genius.

In spite of the numerous illustrations, the work is in no sense a picture book. In addition to the text, the author includes lists of Hemmel's work, both extant and lost, glass influenced by or attributed to him, and a chronological list of relative documents. The study begins with a history of the Peter Hemmel controversy in the literature of art and the false attribution of his work to the unidentifiable Hans Wild whose signature appears on the *Jesse Tree* window at Ulm Cathedral.

The short biography that follows is based upon the all too few documents recording events in Hemmel's career. Missing dates are supplied from the author's own conclusions, based upon the existing evidence. Peter Hemmel must have been born about the year 1422, since he married the widow of the glass painter Hinz in 1447. He became a citizen of Strasbourg by virtue of his marriage and served there as an alderman in 1475 and 1476. Nothing is known of his early life or training. His earliest existing work, in Dr. Frankl's opinion, is the series of panels painted for St. Wilhelm in Strasbourg, which cannot be dated before 1462, when Hemmel was approximately forty years old. Within the next 39 years, however, the author records the astounding figure of approximately 33 major commissions, encompassing some 678 panels, executed or directed by the master. It is not surprising, therefore,

that Hemmel sought the assistance of other master glaziers, since the author estimates that at best his own workshop could produce only about 15 panels a year. The contract of 1477 recording his association with four other Strasbourg glass painters is not preserved but is mentioned in a document of 1480. He was paid for his last known commission in 1501. Since nothing which can be attributed to him postdates this work, the author assumes that Peter Hemmel's death occurred shortly thereafter.

The bulk of the text is devoted to a chronological discussion of the artist's work. This is divided into three sections covering Hemmel's work up to the agreement of 1477, the period of collaboration with the four other masters, and the late works. In each of these sections, problems concerning the work are discussed in detail, with scrupulous attention paid to the opinions of other writers. Questions are raised and often answered by what the author modestly terms an hypothesis. This characteristic restraint from dogmatic interpretation not only provokes thoughtful consideration on the part of the reader but also may well, as Dr. Frankl urges in his introduction, call forth future studies by other scholars.

No other examples from Hemmel's early period have caused as much discussion on the part of art historians as the panels from St. Wilhelm in Strasbourg, which Dr. Frankl considers his earliest existing work. The complicating factor at the outset lies in the duplication of these panels in the parish church of Walburg. For Hans Wentzel (*Meisterwerke der Glasmalerei*, Berlin, 1954, p. 64) the Walburg windows represent an earlier stage in Hemmel's development, the central bay being dated by an inscription, 1461. This opinion is shared by Louis Grodecki (*Vitraux de France du XI<sup>e</sup> au XVI<sup>e</sup> Siècle*, Paris, 1953, p. 83). Lilli Fischel (*Die Karlsruher Passion und ihr Meister*, Karlsruhe, 1952, pp. 25ff.) on the other hand, believes that the cartoons for the work in both churches, with Strasbourg preceding Walburg, were designed by Hans Hirtz, painter of the *Karlsruhe Passion*. Dr. Frankl, in contrast to these various opinions, sees two different hands at work in St. Wilhelm. The first he identifies as the Walburg master of 1461. The second is Peter Hemmel. In his hypothesis, the Walburg master, the elder of the two, may well have been influenced by Hirtz and may even have used cartoons by him for Walburg. The glazing of the choir of St. Wilhelm involved a much larger program and necessitated the hiring of an assistant. Hemmel's earliest work, a *Joachim in the Fields*, ca. 1462, was painted for the *Life of Mary* window. In every sense it is a copy of the panel at Walburg, but the stylistic differences between the two works and, indeed, between Hemmel's panel and the others of the Strasbourg window cannot be ignored. While the style of the Walburg master is dramatic, hard, and often ugly, Hemmel's work is softer, and the rendering of form more modulated. No

other explanation except the presence of two masters working in close collaboration can account for this difference. The *Entombment*, apparently for a lost *Passion* window which Dr. Frankl dates ca. 1466, is basically the Walburg composition, but Hemmel has corrected and enriched the model. The head types, particularly that of the Mother, leave little doubt that he was already familiar with Flemish panel painting.

A certain amount of speculation on the part of scholars has arisen over Hemmel's activities in the intervening period. The work was interrupted in 1463 by his military service. Erich Egg ("Die Holler Glasgemälde und ihre Meister," *Veröffentlichungen des Museums Ferdinandeum*, Innsbruck, xxxi, 1951, p. 85) contends that he executed donor panels, now lost, for Count Eberhard in the parish church of Seefeld in 1465. The author accepts this theory as hypothetical but warns of the many open questions it leaves, particularly that of our ignorance as to how much lost work Hemmel may have done for St. Wilhelm. The *Appearances of Christ* of ca. 1467 that followed at St. Wilhelm, which Dr. Frankl reconstructs including the *Donor Panels* now at the Cluny Museum, has been very much restored. Enough original glass remains, however, to demonstrate Hemmel's evolving early style and the gradual freeing of his composition from the Walburg models. A warmth and depth of feeling, a greater richness and spaciousness appear in his work, qualities never realized by the Walburg master.

Among other examples from the early period are the *Appearances* window of 1468-1469 for the Church of the Magdalene in Strasbourg, destroyed by the fire of 1904. Two damaged panels from this window are now in the Frauenhaus Museum. Fortunately, as a record of Hemmel's later work for this church, its glass had been published in 1902 by Robert Bruck. *Crucifixion* windows at Colmar, ca. 1469-1470, and at Keysersburg in the following year preceded his return to St. Wilhelm to execute the *St. Catherine* window completed in 1472. The growth of the master's style is here represented by the greater degree of naturalism and grace with which he paints the foliate sprays of the border and by the new radiance and calm of his idealized figure types.

Nothing remains of his work for 1473, while the next two years were fully occupied by the fragmentary *Madonna* now in the museum of Oberehnheim, the lost window for the Cathedral of Frankfort on the Main, and the three panels for Hans von Bubenhofen in the Amanduskirche in Urach. Bubenhofen again employed Hemmel in the following year for the execution of his *St. John* window in the choir of the Collegiate church at Tübingen. Two other windows in the apse were completed in 1477 for Count Eberhard.

The late work of this period indicates a marked change in Hemmel's work in both style and composition. As Hans Wentzel (*op.cit.*, p. 67) remarks, the figures are smaller and more slender, while the style of drawing becomes more refined and harder. The head of Bubenhofen in Urach marks the first appearance of an actual portrait in the artist's work. Other

innovations are the tectonic baldachins and scenes that extend across two or more panels, both of which make their first appearance in the windows for Count Eberhard. The new style has aroused much speculation as to sources. Wentzel postulates a trip to the Netherlands or Rouen between 1473 and 1475, where Hemmel could have seen Roger van der Weyden's work. Robert Bruck (*Die Glasgemälde der Magdalenenkirche in Strassburg*, Strasbourg, 1902, pp. 131ff.) and other scholars have demonstrated Martin Schongauer's influence. Dr. Frankl notes these varying opinions but reserves his own hypothesis for the last section on General Problems.

The year 1477 marked the beginning of Hemmel's association with the four other Strasbourg glass painters. Their names, Lienhart Spitznagel, Hans von Maursmünster, Diebolt von Lixheim, and Wernher Störe, are given in the document of 1480, but only Lixheim can be identified with his work. In 1504, long after his association with Hemmel was ended, he signed his great north transept window at Metz cathedral. The other masters are called for their most characteristic work: the Clemensmeister, the Ratsmeister and the Lautenbach Meister.

Much of the confusion over Hemmel's style has resulted from the works of collaboration done during this period—1477 to 1482. Previous to the writing of this volume, no attempt had been made to separate the hands of the five masters and, thereby, to define the extent of Hemmel's own participation in the work. By careful study of detailed photographs, Dr. Frankl has been able to pick out and characterize the *handschrift* of the master and his four associates.

The work of the Clemensmeister is impressionistic, impatient, and not without a certain quality of geniality. He tends to accentuate the wrinkles in faces with heavy dark outlines. To him are attributed the figure of *Pope Clement I* at the Frauenkirche in Ravensburg, ca. 1477-1478, scenes from the *Life of Mary* in the middle window at Tübingen of 1478, the *Tree of Jesse* and other panels from the Kramer window at Ulm of 1478-1480.

The Ratsmeister was less sure of his anatomical construction and given to crosshatching in shaded areas. His chief work is the *Ratsfenster* for Ulm of 1478-1480. The execution of portions of two windows at Tübingen may also be attributed to him. These are the *Sin and Fall* of 1479 and the *Last Judgment* of 1480.

Freedom of fancy characterizes the work of the Lautenbach Meister. Birds often invade the branches of the baldachins, seemingly his specialty, while the globular fruit that hangs from these branches is often placed asymmetrically. Sometimes, as in the donor panel of Anton von Ramstein, now in the William Rockhill Nelson Gallery, Kansas City, an architectural pinnacle sprouts from the end of a branch. He had a predilection for aged facial types and flattened profiles. The glass at Lautenbach, ca. 1482-1487, originally about ninety-four panels, is ascribed to him and his workshop. His hand is distinguished previously in the

*Offering* window at Tübingen of 1478 and in the baldachins of the *Kramer* window of 1479 at Ulm.

The work of Lixheim is more difficult to define. One wishes that the author had included a detail of this master's works among the plates. Certainly he was responsible for the glass at Oberehnheim of 1483-1485. It is doubtful that Hemmel had anything to do with this work. It was not begun until after the collaboration had been concluded and was executed during the time when Hemmel himself was fully occupied with commissions in France. The donor portrait of *Rempp von Pfullingen*, ca. 1479, at Tübingen and the destroyed *Resurrection* at the Magdalene church, Strasbourg, of 1480-1481 may be Lixheim's work. The so-called continuation method of composition at Strasbourg, by which the *Resurrection* and *Appearance to the Magdalene* are combined into one scene, was not otherwise used by Hemmel. The dearth of work by Lixheim, certainly a most capable master, leads the author to believe that he was assisting Hemmel in preparing cartoons for the other masters. Hemmel could not single-handedly have produced all the sketches and drawings necessary for the many commissions which fall within this period. Dr. Frankl further suggests that during this time, Hemmel's own journeymen were lent out to other masters to aid in the execution of the work and to train the other workmen in Hemmel's own methods. This probably accounts for the fact that only a few small windows from this period are attributable to the master's own hand. Chief among these are the two Strasbourg commissions, the six *Lazarus* panels of 1477 for the Magdalene church and the window for Augustin Klaner of 1479-1480 in the Nonnberg church. This latter example, in Dr. Frankl's opinion, exhibits for the first time since the Colmar Crucifixion the influence of Schongauer on Hemmel's work.

Few of Hemmel's late works are still extant. Of the windows painted for Bar-le-Duc and Nancy between the years 1483 and 1486, only the insignificant fragment of a baldachin from the Franciscan church at Nancy, now in the museum, remains. The two commissions from this period that are still in place, however, represent the largest, most grandiose, and technically perhaps the finest work ever produced by the master. The first of these is the window executed for Peter Volkamer between 1486 and 1487 in St. Lawrence, Nuremberg. The composition, filling six lancets divided into seven zones, is clearer and optically richer than anything Hemmel had attempted before. The three uppermost zones are occupied by baldachins, no more than slender finials entwined with flowers.

Hemmel's baldachin type underwent several changes during the course of his career. The earliest, or tectonic, type has been mentioned previously as making its first appearance in the early work for Tübingen. Other types follow in rapid succession in the same church. The *Offering* window combines and confuses flowering branches and architecture in a completely irrational manner, while the architecture of the unidentified window No. 2, right, is all but lost in a

botanical maze. The several types are combined in the *Kramer* window at Ulm but extend across more than one panel. A semblance of order and the return to a basically architectural structure occurs in the Volkamer window, an influence probably of the Late Gothic *schnitzaltar*. The curious figures of the Man of Sorrows and Mater Dolorosa, half hidden behind the central baldachins, are conceived in terms of sculpture. In the Late Gothic sense, they are completely understandable, since they desire completion without forsaking clarity in the higher sense.

By far the largest single work ever executed by Hemmel is the *Scharfzandt* window of 1488-1493 in the Munich Frauenkirche. It contains a total of 115 panels, plus tracery lights, set in five lancets of twenty-five zones. Each of the four scenes, depicting the *Adoration of Saint Rupertus* and the *Three Joys of Mary*, covers fifteen panels of the window. In contrast to the irrational space of the earlier work, each of these settings is carefully worked out in one-point perspective. In this, his last extant work, therefore, Hemmel seems to have found not only the means of representing space but also a type of expanded composition by which to govern it. The great baldachins above the scenes include all his earlier types. His heads are both portraits, perhaps even including his own, and idealized representations. Schongauer's influence is present in many of the details, while the problematical motif of the adoring angels in the *Nativity* may be traced either to the Netherlands and such works as the Portinari Altarpiece or to the engravings of the German Master E. S.

In the concluding chapter, entitled "General Problems," Dr. Frankl discusses the question of influences on Hemmel's work. He admits the possibility of a journey to the Netherlands to see Flemish panel painting during Hemmel's period of travel between 1437 and 1441 but suggests that he would more probably have sought out the work of a glass painter to study. From such an accomplished master as Hans Acker at Ulm, Hemmel could have learned the use of the silver stain on blue glass for foliage and landscapes. His earliest work was dominated by the style of the Walburg Master, from whom he learned the use of the brocaded background, the foliate border, the diaphragm arch, and principles of composition. The author objects to Wentzel's theory of a journey to the Netherlands in 1474 on the grounds that Hemmel was fully occupied during the time. His work did not change suddenly, as Wentzel suggests, but developed slowly and steadily after the *St. Catherine* window and his freedom from Walburg. Dr. Frankl indicates that this much discussed Netherlandish influence might have been secondhand, transmitted by the Master E. S. Hemmel's dependence on the work of this master may be traced all the way back to his early glass for St. Wilhelm and indeed is also noticeable in the Walburg Master himself. Schongauer's influence, on the other hand, except for the problematical Colmar *Crucifixion*, is most strongly felt after 1478; but it continued throughout Hemmel's career. It has been suggested that Schongauer worked with Roger van der Weyden during his travels ca.

1460. In any case, he was strongly influenced by the Flemish panel painters and may well have passed this on to Hemmel.

Though the author's treatment of Hemmel's technique and style admirably defines these individual qualities in the artist's method of working, the few words devoted to color seem inadequate for an art so dependent upon color for its effect. No color catalogue is included since, in the author's opinion, the reader does not gain by this. Similarly, there are no color plates, as reproductions can hardly approximate the effect of stained glass. The purpose of the book, as stated in the introduction, ". . . ist nicht dazu da, Hemmel's Werke zu ersetzen, sondern die Betrachtung der Originale vorzubereiten." This is justifiable and will present few problems for his German readers but, perhaps, insurmountable difficulties for others who will also read the book. For the benefit of the latter, perhaps one or more color reproductions, inadequate though they may have been, and a few remarks on this aspect of the more significant windows might have been included.

This criticism, however, is superficial in the general excellence of Dr. Frankl's presentation of the material and in the timely addition this book makes to the literature on stained glass. Peter Hemmel's importance to the development of this art can hardly be overestimated. His career spans that period which witnessed the culmination of the Gothic style and the introduction of the Italian Renaissance to northern Europe. During this time, on both sides of the Alps, more and more glass was designed by panel painters. Few of these artists ever realized the primary considerations of this medium. Hemmel, on the other hand, trained from the beginning as a glass painter, understood both the architectural function of the window and the aesthetic value of colored light. It is fortunate for architectural glass that his influence was so great and that his principles of design made a lasting impression. The present volume, therefore, in its clearly defined study of this important master and his work, also contributes immeasurably to the general artistic knowledge of this period. Dr. Frankl has given us, in this book, a work of which he and his colleagues may be justly proud.

JANE HAYWARD.  
[Yale University]

ANDRÉ CHASTEL, *Marsile Ficin et l'art* (Travaux d'humanisme et renaissance, XIV), Geneva, Librairie E. Droz, 1954. Pp. 207; 5 pls. 28 Swiss francs.

The relations of Renaissance art with the philosophical movements of the period, and especially with Renaissance Platonism, have been of interest to several art historians in recent years, and the relevant studies by Panofsky, Saxl, Wind, Gombrich, Tolnay, and Chastel himself, to mention but a few distinguished examples, come easily to mind. These studies, by bringing together two areas that are too easily divorced

from each other, have greatly contributed to the understanding of the cultural and intellectual history of the Renaissance period, and they are especially fruitful for the student of the history of philosophy, since they have concentrated on thinkers and on problems that might otherwise have escaped his attention. Evidently, the relations between art and philosophy can be, and have been studied in several different ways. Historians have tried to ascertain the personal contacts between individual artists and scholars; the philosophical and literary sources that account for the iconography of specific artistic themes and compositions; the intellectual traditions behind the aesthetical opinions and statements found in the writings of artists and art theorists. Moreover, they have been aiming, at least indirectly, at something more fundamental, though more elusive: the stylistic analogies between the different expressions of the same period and the other signs that may indicate that certain works of art and of thought originated in a common intellectual climate or were conceived as a response to common problems or situations. It is in this spirit that Professor Chastel has attempted to relate Renaissance Platonism, and especially the thought of Marsilio Ficino, to the art and aesthetics of the whole Renaissance period.

The book consists of an introduction, in which Ficino and his circle are described in detail, and three major sections. The first part ("L'Art") shows that Ficino conceives man as a universal artist and stresses the role of magic in his view of the physical universe. The second part ("Le Beau") emphasizes the place of light and proportion in Ficino's theory of the visible world and tries to link him in this respect with Alberti and Pacioli. The third section ("L'Artiste") describes Ficino's theory of love and of divine madness, his use of mythology and allegory, his concept of a pagan revelation and tradition, and finally his theory of melancholy. In the conclusion and appendices, it is shown that Ficino and such members of his circle as Landino and Verino took an active part in shaping the historical notions concerning Florentine art that were to culminate in Vasari.

This brief summary fails to give an impression of the rich and diversified content of the book, which is full of interesting and suggestive ideas and draws on a great variety of sources and studies. The documentation in the notes appended to each chapter is abundant, though marred by a number of misprints, especially in the references and citations. Professor Chastel shows excellent judgment on the literary and social aspects of his topic, and his description of Ficino's style (pp. 45-48) is the best I have ever seen. His remarks on the role of magic, astrology, mythology, allegory, and the pagan tradition in Ficino and on their influence in the later Renaissance are convincing, as are the discussions of particular mythological figures such as Hermes, Orpheus, Saturn, or Prometheus. Interesting also is the attempt to link Ficino's theories of light and proportion with Alberti. Yet on this, as on other points, greater attention might have been paid to ancient and mediaeval philosophical sources. The

crucial treatment of proportions is found in Ficino's commentary on Plato's *Timaeus*, a work that contains several new and original elements but should be analyzed against the background of Plato and of previous commentators. Ficino's early work on perspective, vision, and mirrors (p. 40) seems to be extant (cf. my *Studies in Renaissance Thought and Letters*, Rome, 1956, pp. 77ff. and 146ff.), and it is linked with Aristotle and his commentators rather than with Alberti. Ficino's discussion of the hieroglyphics is linked with a passage in Plotinus, and his comparison between God and the architect is based on a broad ancient tradition that begins with Plato. In describing Ficino's affiliations, Epicureanism should not be omitted. There are also some details of biography and chronology on which I disagree, but which do not affect the substance of the book. (Ficino hardly studied at Bologna, or underwent a moral crisis; his commentary on Plato's *symposium* was written in 1469, and his translation of Plotinus was finished in 1486, and printed in 1492.)

The picture of Marsilio Ficino that emerges from Professor Chastel's pages is somewhat different from the one given in my book on his philosophy (1943), and I must admit that it is much more colorful and suggestive. In trying to concentrate on the philosophical skeleton of Ficino's thought, I probably neglected too much the ornamental side of his writings that appears in his allegories, metaphors, and quotations and that Professor Chastel has brought to the fore in an interesting fashion. Aside from the difference in emphasis, there is a basic question involved. That is, should we allow the imaginative side of a philosophical writer to have a life of its own, or should we relate and subordinate it to his central theories and convictions? Since I happen to be a party to this dispute, I must obviously leave judgment to others. Yet I am ready to grant that the place and importance of individual ideas and motifs in Ficino's own "system" of thought was probably different from the impact they had on his philosophical and artistic contemporaries, let alone on their successors in the sixteenth century, and it is this impact which Professor Chastel obviously had most in mind.

There is one basic point of doctrine on which I must disagree with Professor Chastel's interpretation. It concerns Ficino's theory of contemplation. This notion, which is central in Ficino, has for him strong metaphysical and "mystical" connotations, and it is rooted in the Neoplatonic and mediaeval Augustinian tradition. Contemplation is for Ficino the source of spiritual experience and of our knowledge of the invisible, which includes God and Ideas. It has no artistic connotations for him whatsoever, although later authors may have applied Ficino's concept to an analysis of artistic experience. Hence I cannot follow Professor Chastel where he tends to ascribe to Ficino a theory of artistic contemplation.

Behind this difficulty, there is a more general problem. I have tried to show elsewhere that the conception of Art as a separate area of experience, different from the crafts and the sciences and the subject of a separate philosophical discipline known as aesthetics, is a modern,

romantic notion that did not emerge before the eighteenth century (*Journal of the History of Ideas*, XII, 1951, pp. 496-527; XIII, 1952, 17-46), and that we should be careful not to read our understanding of "Art" into the passages where ancient, mediaeval, or Renaissance authors use that word. I should like to add that as a result of this fact the transition from the practice and theory of the visual arts to an "aesthetic" world view was not as easy or obvious in former centuries as it has become during the last two hundred years. It is true that the romantic concept of Art had some of its roots in Renaissance thought, and especially in Platonism, but this does not mean that the romantic notion as such was present during the Renaissance. To clarify these relationships, clear distinctions and much further work will be needed, in order to describe the precise nature and development of modern artistic and aesthetical thought from the Renaissance to the romantic era and afterwards. Professor Chastel's book, with its many suggestive ideas and rich material, is a most welcome contribution to this important subject. It is bound to appeal to all art historians interested in the intellectual history of the Renaissance. It should also appeal to those students of philosophy who not only have retained some historical interests but do not wish to see our "humanistic" heritage disappear in the present bleak alternative between science and religion.

PAUL OSKAR KRISTELLER  
Columbia University

ERWIN WALTER PALM, *Los monumentos arquitectónicos de la Española con una introducción a América*, Ciudad Trujillo, República Dominicana, Universidad de Santo Domingo, 1955. Vol. I, i-xxxii, 209 pp., tabla sinóptica, 23 plates; Vol. II, 217 pp., 104 plates.

The island of Santo Domingo has the distinction of being the site of the first European settlement in America. Consequently, the earliest monuments of Hispanic colonial architecture, dating from the first half of the sixteenth century, which survive there, have a unique significance historically and artistically. Dr. Palm, who has resided in the Dominican Republic for many years, offers in these two handsomely printed volumes the results of painstaking and exhaustive research into every aspect of colonial culture. He begins with a résumé of the cultural history of Europe in the late fifteenth century, its literature and philosophy, and its intellectual and emotional point of view. From there he proceeds to discuss the projection of Europe into the New World, considering even the character of the first discoverers and colonizers, men like Alonso de Hojeda who, to demonstrate his athletic prowess, tossed an orange to the top of the Giralda tower in the presence of Queen Isabella; or Nicolás de Ovando, founder of the present city of Santo Domingo and of the famous hospital of San Nicolás, who made his men marry their Indian concubines. Dr. Palm insists upon the mediaeval

nature of the adventurers' thought and upon the late mediaeval institutions and customs which they transplanted to the New World.

Exact information about the first towns founded in the New World is shrouded in the vague references of early settlers and chroniclers, and that fact combined with the lack of extensive excavation leaves many questions unanswered, as Dr. Palm demonstrates in his minute examination of all literary and archaeological evidence relating to these settlements. Therefore, knowledge of the first quarter century of colonization and settlement in the island of Santo Domingo is at best fragmentary and hypothetical. Little is known of La Isabela and Nueva Isabela, the first towns, which soon gave way to the city of Santo Domingo (at present called Ciudad Trujillo). Founded in 1498 and laid out anew in 1502 after a hurricane, the present capital then took the form of a gridiron following the recent model (1491) of Santa Fe de Granada. In reviewing the numerous theories of origin of the quadrangular city in America, Dr. Palm points out the fact that Indian influence in the plan of Santo Domingo can safely be excluded and that the position of Santo Domingo in relationship to the plans of Mexico City and Cuzco has been overlooked up to the present. Much attention has been given to possible influence of the pre-Columbian cities on the colonial urbanization of these famous capitals.

The first volume of the present study is in large part devoted to the history of the island of Santo Domingo and its centers of population and its relations with Spain and the other Spanish colonies of the New World. The detailed account of pestilences and consequent loss of life among both Indians and Europeans, of the devastations of hurricanes and earthquakes, of the repeated attacks of pirates, leaves one amazed that anything at all of colonial architecture should have survived until the twentieth century. The worst of all was the sacking and burning of the city of Santo Domingo by Sir Francis Drake in 1586, a blow from which it never fully recovered until modern times. The part played by the Church and Crown as well as by the inhabitants throughout these troublesome centuries is recounted and fully supported by documentary and literary accounts. Dr. Palm holds the belief that the Dominican university established by papal bull in 1538 really functioned in the true sense as a university, and thus he agrees with Dominican adherents against the claims of Mexico City and of Lima for primacy in university matters. This section of the book offers to the art historian a comprehensive account of the historical and cultural background of Dominican history which will not be readily found elsewhere, and is therefore of particular interest and value.

In his discussion of the architectural monuments Dr. Palm first gives his attention to the general considerations of types of plans, styles, and sources, and later turns to a consideration of each individual monument.

The glory of Santo Domingo came early, that is, in the sixteenth century, for the island fell into the background in the seventeenth and eighteenth centuries, when primacy passed to the viceroyalties of Mexico and Peru. Her domestic structures such as the ruins of the great palace of Diego Colón (ca. 1510-1512), the various Plateresque portals, and the palace at Engombe (ca. 1535) testify to the extraordinary splendor of colonial civilization from the very start and to the advanced state of architectural styles in the New World. These villas with their Italianized loggias, sometimes combined with a late Gothic portal like that of the palace first mentioned, are as fine as similar works in Spain itself.

The masterpiece of religious architecture in Santo Domingo is, of course, the cathedral. Begun in 1523, its vaults were closed as early as 1537. The hall type of building is not uncommon in Spain during the late Gothic and early Renaissance periods. As for an explanation of the circular piers, employed here and also commonly in Spanish churches of the sixteenth century, Dr. Palm favors August L. Mayer's theory of a return to late Romanesque models. However, since circular piers of this type are often crowned with classical moldings (Berlanga de Duero and Mérida Cathedral) or Doric capitals (La Magdalena, Getafe), it is reasonable to follow the orthodox belief that piers like those of Santo Domingo represent a simplifying phase, caused by the Renaissance movement into which they directly lead.

The façade of the cathedral of Santo Domingo is, as Dr. Palm rightly insists, one of the major monuments of the Spanish Plateresque. Datable ca. 1537-1540, it is therefore contemporary with Diego Silóe's Puerta del Perdón (1537) of Granada Cathedral and in some respects related to the style of the famous Spanish architect. For this reason Dr. Palm doubts that Rodrigo de Liendo, who was *maestro mayor* of the cathedral of Santo Domingo in these years, could have designed the façade, since he left Spain about 1527. He therefore cautiously leaves the problem of the designing architect open to future discovery.

In his general discussion of the Plateresque architecture Dr. Palm returns to one of his favorite theories, i.e., that this architectural style cannot be limited to the sixteenth century, but, on the contrary, that it continues for two centuries more.<sup>1</sup> Nevertheless, even in a frankly archaic monument like the entrance to the Capilla del Rosario in the church of Santo Domingo, located in the capital of the Dominican Republic, the carving of details, particularly the upper section, betrays the fact that it is a work of the Baroque period rather than of the Spanish Renaissance. No one will dispute the fact that every period has its premonitions and its archaic survivals, but one need not overlook the still more important fact that each period has a set of predominant characteristics of style, which give it autonomy. An example, which Dr. Palm chooses to

1. E. W. Palm, "Estilo y época en el arte colonial," *Anales del Instituto de Arte Americano e Investigaciones Estéticas*,

prove that the Plateresque survived in the eighteenth century, is the silver tabernacle in the Bolivian church at Laja.<sup>2</sup> This monument, however, does not really support his thesis, since the decorative motives are Rococo, and the repoussé technique of the work is similar to that used in hundreds of other provincial eighteenth century monuments. Dr. Palm also cites the ornament of the two famous palaces (Villaverde and Díez de Medina) in La Paz, Bolivia, to illustrate the same theory. These buildings cannot, in my opinion, be considered out of context, for they belong in every respect to the school of La Paz, as does the celebrated church of San Francisco there (1753-1772).<sup>3</sup> This school is related to those of Pomata and Potosí and to that of Arequipa in southern Peru. Many writers have characterized as *mestizo* this style, which is the product of the crossbreeding of European and native culture.<sup>4</sup> The date ("año de 1775") of the Díez de Medina palace appears in a medallion upon the portal of the stairway of honor, and below it the year 1887 obviously refers to later additions in brick to the original stone construction.<sup>5</sup> Undoubtedly I have placed too much emphasis upon the question of Plateresque style in this review, inasmuch as it involves only one small point in a lengthy and scholarly book. Even though it is difficult to accept Dr. Palm's theories about the Plateresque, he admirably avoids other pitfalls, such as the indiscriminate use of the term Mannerism for all nonacademic phases of Spanish Renaissance and Baroque architecture.

Dr. Palm emphasizes the rarity of *mudéjar* elements in Santo Domingo, and points out the contrast to the wide preponderance of such decorative motives as well as wooden *mudéjar* ceilings throughout the rest of colonial Spanish America. This phenomenon is difficult to explain, even if it could be attributed to the destructive forces of earthquakes and hurricanes alone. Dr. Palm again, as in earlier publications, rejects the pointed horseshoe arches in the remains of the church of Santiago de los Caballeros as a romantic reconstruction of the nineteenth century.<sup>6</sup> Since I have never examined the monument on the spot, I am unable to give any valid opinion on the subject. Nevertheless, the photographic evidence of these arches, which collapsed in the earthquake of 1946, and the arguments of Professor Diego Angulo, who assigns these remains to the year 1511 and characterizes them as the earliest examples of *mudéjar* in America, are more convincing.<sup>7</sup>

In the second volume of his book Dr. Palm gives an

extensive account of every architectural monument within the boundaries of the Dominican Republic on the island of Santo Domingo. He has devoted years of research to the study of documents, literary sources, and the buildings themselves. It would, therefore, be futile to attempt here a résumé of his findings, since every student of Hispanic architecture must learn for himself from this monumental publication, which is unquestionably one of the most important studies ever made of any phase of Latin-American art.

HAROLD E. WETHEY  
University of Michigan

LEO VAN PUYVELDE, *Jordaens*, Paris, Elsevier, 1953.  
Pp. 238; 101 pls. 485 Belgian francs.

No comprehensive study on Jordaens has been published since 1905, the year of Max Rooses' basic work and of Paul Buschmann's much smaller but perceptive and readable monograph. A great deal of new material has come to light, and many contributions in the form of articles have been printed since then, among them Burchard's important study of 1928, in which Jordaens' early career was established for the first time. The master's oeuvre has also been swelled by a number of unwarranted attributions, and the problem of whether a picture is an original, a repetition by the master himself or by the studio, or a later copy, is particularly troublesome with Jordaens. There are also many other questions that still need to be answered, or at least investigated. The specific intellectual background of Jordaens' art—which admittedly was not very profound—can be much more clearly defined than has been done hitherto. There are a great many unusual themes in the master's work the significance of which for himself and for his environment deserves to be studied. There are even a few rather obscure subjects among his paintings, one of which puzzled a very well-informed observer even in his own century.

It would be vain to expect answers to such questions from van Puyvelde's book, the first major work on the artist published in fifty years. What he gives his reader is primarily an "appreciation" of the master's art. One reads much of "la belle peinture," "la pâte grasse," "la facture lisse" or "audacieuse" or "magistrale," "carnations laiteuses," a "soupçon de vermillion," and even a

2. Martín Noel, *El santuario de Copacabana*, Buenos Aires, 1950, pl. 131.

3. H. E. Wethey, "Mestizo Architecture in Bolivia," *Art Quarterly*, XIV, 1951, pp. 298-300; also Mario Buschiaro, *El templo de San Francisco de la Paz*, Buenos Aires, 1949, pls. 78-82. Rococo ornament is conspicuous in the patios of these two palaces.

4. Angel Guido, *Fusión hispano-indígena en el arte colonial*, Buenos Aires, 1925; H. E. Wethey, *op.cit.*, pp. 283-306; H. E. Wethey, *Colonial Architecture and Sculpture in Peru*, Cambridge, 1949, Chapters 8-9; Martin S. Noel, *La arquitectura mestiza en las riberas del Titicaca*, Buenos Aires, 1952; Professor Enrique Marco Dorta prefers to use the term "estilo andino," see *Historia del arte hispanoamericano*, III, Barce-

lona, 1956, pp. 316-320, 412-482.

5. Buschiaro, *op.cit.*, pl. 82, shows clearly these inscriptions, which I also examined when I was in La Paz. The young Bolivian scholars, José de Mesa and Teresa Gisbert de Mesa, have recently re-examined the building at my request, and they are unable to account for the dates 1804-1837 which Dr. Palm gives for this palace.

6. First published by Martín S. Noel, *Teoría histórica de la arquitectura virreinal*, Buenos Aires, 1932, p. 144; E. W. Palm, "Las ruinas de Jacagua," *Boletín del Archivo General de la Nación*, IX, pp. 93-100.

7. Diego Angulo, *Historia del arte hispanoamericano*, Barcelona, 1945, I, pp. 98-99, fig. 118; Angulo, *El gótico y el renacimiento en las Antillas*, Seville, 1947, pp. 11-15.

"soupçon de vulgarité," but in the end Jordaens emerges again as the same plain-spoken, middle-class, and exasperatingly uneven artist that he has always been considered.

An artist given to a flamboyant, colorful, and decorative style, Jordaens for van Puyvelde is "a man of the Baroque," with the supposedly original note of placing religious subjects in everyday environments. Van Puyvelde does not mention Caravaggio in this particular context and in general tries to disavow any noticeable influence of the Italian master on his northern colleague. It is interesting for his concept of Caravaggio's art that he praises Jordaens for never having stooped in his realism to the depths of triviality (!) of Caravaggio's St. Matthew or his Doubting Thomas. There are brief comments on Jordaens' Calvinism and on his moralizing themes but no attention is given to the significance of Jordaens' interest in proverbs. Pieter Bruegel's name, as far as I can see, does not occur in the whole book. Van Puyvelde goes into the often repeated connection of Flemish Epiphany celebrations with the "Le Roi Boit" scenes, but is unaware of the roots that they have in traditional representations of gluttony. Iconographic traditions, indeed, are never mentioned, and stylistic ones rarely, except for a single observation, repeated several times, which ties Jordaens to his teacher and father-in-law, van Noort. (Van Noort was the object of an earlier study of van Puyvelde's.) The influence of Rubens on Jordaens is admitted but never formulated precisely; as regards van Dyck, the author speaks of a close association of the youthful artists in van Dyck's "atelier libre" (whatever that means) where they mutually stimulated each other. I do not know what the historical basis is for this assumption.

Basically, at any rate, van Puyvelde's book is the record of a meeting, in a purely aesthetic realm, between a gifted and vigorous writer with a flair for rhetoric, and an equally forceful and equally "bien flamand" painter. For what he considers conventional history of art van Puyvelde has a good deal of contempt. He pulls no punches in his attacks, though more often than not he demolishes straw men set up for the purpose. "Modern erudition often has the tendency to travesty art history into a dry nomenclature of facts and dates" (p. 13) instead of approaching "the soul of the creative artists." He scores the "current conception that each artist undergoes the influence of his elders and necessarily follows in the tracks of his master" (p. 71). He scoffs at the "divining rod art historians," who always detect influences rather than see what is original and personal (p. 143)—but I fail to see how a true idea of an artist's originality can be gained unless one also knows what he owed to others. Blaming Morelli, surprisingly, for attributions made on the analogy of iconographic themes (p. 79), van Puyvelde feels that too many attributions are made with "culpable" or "regrettable" carelessness (pp. 23 and 80). One avowed aim of his work, indeed, is to teach the reader to recognize the style of Jordaens and to determine whether or not a given piece is entirely by

the hand of the artist and from which of his periods it comes (p. 75).

I regret to say that van Puyvelde is not the most reliable guide towards that kind of connoisseurship, even if it were possible (as it is obviously not) to teach connoisseurship in this manner. One of the few paintings which van Puyvelde introduces into the literature for the first time—listing it indeed, quite unaccountably, with the works authenticated by documentary evidence—is a half-length figure of St. Matthew in a private Brussels collection (fig. 41), a work of undeniable quality but completely foreign to Jordaens' style. There are several pieces in the checklist which demonstrably are not by the master. Moreover, though he is much concerned with the dates of Jordaens' works, van Puyvelde frequently resorts to blaming on the artist's supposed inconsistency, unpredictability, and even confusion his own difficulties in establishing a chronological order. "Son activité créatrice paraît si confuse . . ." (p. 99); "son style oscillera constamment" (p. 119); "il est impossible d'introduire dans cette formidable production un ordre strictement chronologique" (p. 137) are some of his statements.

Little wonder that van Puyvelde's chronology of Jordaens' works makes no sense! Since it would lead too far to take issue with all the erroneous and arbitrary dates assigned to works of the artist, I shall single out one case which led van Puyvelde into a lot of trouble. He reads the date in the painting of a huntsman at Lille "1625" and even gives an enlarged reproduction of the signature (fig. 16), but despite his emphatic "nous l'avons contrôlée" (implying apparently that other scholars have not) the date most certainly reads 1635, a fact recently stressed again by R. A. d'Hulst. Since van Puyvelde considers this picture a crucial piece of evidence, it is inevitable that he sees the whole middle period of the master's development out of focus. I also find puzzling van Puyvelde's apodictical distribution of praise and censure, passing over, for instance, the wonderful *Allegory* in Lille as a work "de moindre valeur" or saying of the impressive and touching *Adoration of the Shepherds* in Grenoble "ce tableau n'ajoute rien à la gloire de Jordaens." Van Puyvelde's tendency to pontificate and to claim a quasi-monopoly on historical truth occasionally goes further than even an indulgent reader can condone. Truth, after all, can be an elusive article, even for those blessed with special insights. On page 59 van Puyvelde says of a drawing in Brunswick that "it still reveals a keen sureness of hand," while on page 181 he decides that the same drawing "n'est d'ailleurs nullement de la main de Jordaens."

With all its faults, the book has nevertheless some merits. The author is too good a writer not to please occasionally with a fitting phrase or a deft observation. He sees, and describes well, the artist's tendency to arrange his figures in the foreground, to choose static poses and decorative ensembles. He recognizes that the artist was still occasionally capable of a sustained and rewarding effort even in the years his creative imagination clearly declined. It is certainly true, too, that a

good many works which are so poor that one might be tempted to blame them on pupils and imitators are very likely by Jordaens himself. There are, in van Puyvelde's book, some data not reported before, as for instance the report, in 1697, of the destruction by fire of a large group of Jordaens' paintings in Sweden (p. 142). The checklist at the end will be found useful despite some errors and omissions (among them the double portrait in Boston which undoubtedly is by Jordaens). Above all, the book is well illustrated. Several paintings and drawings are here reproduced for the first time and the details are generally excellent and illuminating. Equally good and welcome are the color plates.

While it would go too far to claim for this volume credit of having advanced in any significant way our knowledge of Jordaens, it is still capable of giving to the general reader a fair idea of one of the most refreshingly vital painters of Flanders' last great period in art.

JULIUS S. HELD  
Barnard College

F. J. B. WATSON, *Wallace Collection Catalogues: Furniture*, London, Hertford House, 1956. Pp. 360; 120 pls. 10 s. (16 s. cloth-bound).

The Wallace Collection in London includes, among its manifold treasures, what is generally acknowledged to be one of the two or three greatest existing assemblages of French eighteenth century furniture. This is noteworthy, of course; but does it explain why the catalogue of the Wallace furniture should be of particular interest to the art historian, greater than, let us say, the same collection's magnificent armor, which has a comparable standing in its own field? The answer is not hard to find.

Furniture, as an art form, had an extremely short life history; and there can be no question that France, and Paris in particular, was at the heart of this brief flowering. At the time of its height, moreover, the art of making fine furniture was not an isolated or independent creative activity, but one closely integrated with all the other arts. Finally, and most curiously, this whole flowering was the result of conscious intent on the part of a few directing minds. Such a phenomenon as this cannot but be of concern to every student of post-Renaissance art.

To elaborate, however briefly, on these sweeping generalizations: until the latter part of the seventeenth century, furniture as we know it, an important part of the harmonious surroundings of any comfortable way of life, scarcely existed anywhere. Utilitarian chests, chairs, benches, tables, and beds comprised virtually the sum total of furnishings, and most were made to be portable, for easy transfer from place to place, or to be out of the way when not needed. Their embellishment was limited to more or less appropriate carving, or the decoration of leather or textiles used for upholstery; their appeal to us today, when we find them beautiful,

resides in the pleasant harmony of a well-executed craft product rather than the profoundly moving result of a consciously directed creative act.

The change was wrought under Louis XIV, as part of the general establishment of the *arts et métiers* on a new basis, in the service of the royal court, under his art minister, Lebrun. In a few decades, the influence of this integration of the arts (all of them *useful*, in the sense of their function in the consolidation and enhancement of the central power) was felt throughout France and through all Europe as well. For almost the first time, painters, architects, designers, sculptors, cabinet-makers, ceramic-modelers, weavers, and all the other practitioners of the visual arts worked together to create a glorious ensemble, all parts of which benefited by their integration of intent—for, by some miracle never since duplicated, no confusion was allowed between the functions proper to the individual media—and which left us a legacy of beauty in the whole ensemble of daily living not approached by any other age. Only in our own time has a comparable effort, on a far smaller scale, been made with some success to integrate the useful arts: the Bauhaus is the prime example; but one wonders how many collectors of the next century will be bidding up at Parke-Bernet sales such things as Marcel Breuer chairs and Finn Juhl tables.

By 1700, the basic furniture forms as we know them had all come into existence: not only tables, chairs, sofas and the like, but commodes and chests and desks and cabinets, unknown a century before. The eighteenth century, as Mr. Watson points out in his splendid introduction to the Catalogue under discussion, was a time of elaboration and refinement rather than of true experimentation and invention of forms like the one preceding it. At the close of this period, a complex of circumstances brought the brief culminating glory to a close: in France, the Revolution obviously marks the end of the era, as the destruction of the guild system quickly wiped out the technical skill and training upon which rested the whole achievement; but in England and elsewhere, where no such drastic upheaval took place, a similar decline is evident within a matter of one or two decades. We can see that the real culprit was a different kind of Revolution, the Industrial one.

The central importance of France in all this development is unquestioned, for this was the century when Paris assumed the dominance as central mart of taste that only in our own day has it seemed in danger of losing. Even as in the present century—or as far back as the middle ages, for that matter—styles and forms might be created elsewhere in Europe, but their most skilled creators were drawn to Paris as bees to the hive. In furniture, only in England did a rather different taste prevail: a preference for solid woods and plain surfaces of veneering, unlike the French love for gilding, marquetry, inlay, and ormolu; and the English taste eventually exerted its own influence on the course of French furniture design, in the 1780's. But even in England this semi-autonomous course of development could scarcely have reached the heights it did without

the French example, and as in France, it is through that new type of artist, the designer, rather than the simple stay-at-home craftsman, that English furniture became great: Chippendale and Hepplewhite are more famous for their design-books than for the works—hard enough in truth to identify—from their own shops; and the third of the English trinity, Sheraton, is never known to have made any furniture himself whatsoever.

The tremendous quantity of authentic work surviving from eighteenth-century France is further testimony, if such were needed, of the predominance of Paris in that day. All Europe was furnished by the artist-craftsmen of Paris. But to know the work of the time properly, in this as in any other field, we must know the best, and the best-authenticated works. For this, sound and thorough cataloguing is indispensable.

Such a catalogue, a masterpiece of the genre, is provided by Mr. Francis Watson, Assistant to the Director of the Wallace Collection. The book has been two full decades in the making, a long time, but well worth the wait in view of the splendid results embodied in its comprehensive text and massive and, so far as we can tell, absolutely complete documentation. The task was begun as long ago as 1937 by Mr. Watson with Mr. Trenchard Cox, who has since become Director of the Museum and Galleries at Birmingham; their first objective was a thorough descriptive listing to replace the antiquated 1920 catalogue, part of a program undertaken in sections (miniatures and sculpture are already in print, while ceramics and goldsmiths' work remain in process). After the war, Mr. Watson resumed work on the furniture catalogue, with a view to providing a thoroughly documented *catalogue raisonné* instead, which has taken far longer to complete than had been anticipated—as is, it would seem, inevitably the case. Mr. Watson's work has benefited in more ways than one could enumerate by the research and publications of the past decade, not only his own but that of other scholars in the field: the most fruitful results of all have come from the amazing quantity of fresh information unearthed by the indefatigable M. Pierre Verlet, of the Louvre, in the Archives Nationales in Paris. A typical example of a product of Mr. Verlet's work is to be found in the entry on the Louis XV commode, Wallace No. F 86, which bears no ébéniste's stamp, only the double-V of the Versailles inventory, and a signature by Caffieri on one of the bronze mounts. Thanks to this latter inscription, the whole commode was once attributed to Caffieri, who of course was a *ciseleur*, not a cabinetmaker. M. Verlet found in the *Journal du Garde-Meuble* for April 15, 1739, an exact description of this piece on its delivery to the royal bedchamber of the king, and testimony that it was the work of Antoine Gaudreau, now emerging, largely as the result of M. Verlet's various findings, as one of the greatest of the ébénistes of the Louis XV period.

As a matter of fact, the whole mass of material extracted by M. Verlet from the royal archives has brought about the second giant step in the study of

French furniture; the first, of course, was the recovery of the significance of the makers' stamps by Paul Mantz and others, usually attributed to the occasion of the great exhibition at the *Union Centrale des Arts Décoratifs* in 1882 (although Mr. Watson has, on p. 258, some interesting remarks to make about the possibility that the importance of these marks was known to at least a limited circle before that date). The fact that such stamps were not required by the guild until 1741, and that at all times work executed for the French crown was not required to have the maker's stamp or that of the jury of the guild, has meant on the other hand that many of the finest and greatest pieces of furniture have lacked definite attribution: Charles Cressent, for example, first ébéniste of the Regency and one of the formers of the Louis XV style, never stamped his work until his extreme old age. (A symptom of the difficulties this raises may be seen in the case of No. F 85, a commode described in the Introduction, p. xxx, as "one of Cressent's most celebrated pieces," but which in the catalogue entry itself, p. 52, can only be termed "probably" his work.) This huge gap is the one which M. Verlet's findings are filling at a rapid pace: so rapid that, in two volumes to date entitled *Le Mobilier Royal Français* (Paris, 1945 and 1955), he has virtually reconstituted the interior *décor* of several of the most important chambers at Versailles and other royal châteaux; indeed, it appears to be probable that one will soon be able to refurbish, in imagination at least, virtually all of the most important interiors of the Louis XV and Louis XVI periods with surviving pieces of furniture.

Mr. Watson has incorporated into his catalogue, therefore, much more than a mere listing of the pieces in the Wallace Collection. His catalogue section is, in fact, the ultimate in models for this sort of compendium, giving not only a detailed description of each piece, but a full discussion of its known history, previous attributions as well as those held at the present time, references to comparable examples, a detailed bibliography, and even concise but adequate biographical notices of all the artists concerned. In addition, every piece of significance is illustrated in plates which, if not the last word in beauty, serve the scholar's purpose of reference and study better than the more glamorous type of illustration does. The usefulness of the catalogue, already a sort of *Summa* of up-to-date knowledge of the subject, is enhanced by an extended introduction that gives a comprehensive historical and technical survey of the field, and a full bibliography, 65 pages long. Both of these features stand as the most complete and up-to-date available in the English language at the present time. Not to be neglected are the glossaries of French technical terms (so often at variance with the English), as well as of the woods and stones used in eighteenth century cabinetmaking. All this, of course, is related to the French field, for although the Wallace Collection does contain a small number of pieces of furniture from other periods and places of origin, its importance does clearly lie there alone.

The principal categories into which the 527 catalogue entries have been subdivided are as follows: French Gothic and Renaissance (a handful of items); Louis XIV (not a large group—where is one to be found anywhere?—but a splendid one, including such important pieces as the Boulle cabinet, F 16, and the wardrobe, F 61); Louis XV (rich in cabinetwork, numerous magnificent commodes, and, of supreme importance, the roll-top desk made for King Stanislas Lesczynski by Riesener, F 102, a counterpart of the Louvre's desk of Louis XV, begun by Oeben and finished by Riesener; not to mention quantities of superb metalwork, a particular passion of Sir Richard Wallace's); Louis XVI (the largest single group, including numerous examples from the royal collections, and too many masterpieces to bear singling out); later eighteenth century Boulle (a most worthwhile classification made by Mr. Watson, who points out in his introduction the important part played by the Boulle tradition and its revivalists in the formation of the Louis XVI and Neoclassic styles); nineteenth century French furniture; copies of French furniture (including one of the Louis XV desk mentioned above); English; Italian; and miscellaneous furniture, all the last groups quite small in number.

All the critical material in this massive tabulation is handled in the most objective way possible, with a full evaluation of all recorded opinions, and a judicious weighing of evidence in quest of a final attribution. The only complaint that might be registered about this is that occasionally it is all but impossible to tell where Mr. Watson himself stands on some controversial points; but this, surely, if it is to err at all, is to err on the side of the angels. Of course, here and there any reader will find occasion to take exception on minor points, particularly of opinion; this one felt that Mr. Watson tended to deemphasize the Regency period a trifle too much in his introductory remarks, particularly as the Regency style is so strongly evident in a whole group of important works: the bracket clock F 40, the mirror F 50, the console table F 56, the writing tables F 59 and F 111, and so on. The Regency style, whether confined to the actual years of the minority of Louis XV, or to the more general period ca. 1715-1735, has a distinct character of its own, transitional between the Baroque massiveness of even the later Louis XIV, and the lightness of the Rococo Louis XV style; surely it deserves recognition, not necessarily as a separate catalogue section, which would involve terribly fine discriminations and distinctions in too many cases, but at least as a separate stylistic phase. A clear parallel is readily at hand in the painting field, where the work of Watteau is certainly a necessary intermediary between, say, Rigaud and Boucher; thanks to its conservatism and sense of material, furniture does not show the rapid and radical stylistic changes to be observed in painting or sculpture; but the distinctions are there to be seen. It would seem that his very lack of willingness to admit the distinctness of the Regency may be also the cause of a noticeable difficulty Mr. Watson has in pinning down the Rococo; admit-

tedly, there is no consensus on the matter, but it is surely begging the question in a study of this sort to push the beginnings of the Rococo back into the seventeenth century, as Mr. Watson does when discussing Bérain and his contemporaries. One supposes, in retrospect, that Fiske Kimball's monumental *Creation of the Rococo* must be responsible for much of this sort of confusion; this is a pity, for Kimball himself surely never intended to place the Rococo style itself even as far back as Lepautre.

Such differences of opinion and interpretation are of a very minor sort indeed; nor need we point to any noticeable number of significant errors in the proofreading. The only ones that came to our attention as requiring correction for accuracy were minor: on p. xx, the engraver is "Abraham" Bosse, not "Adam"; on p. xlvi, the sofa by Jacob is F 203, not 293; the armchairs F 35-6, described on pp. 15f. as seventeenth century, are more probably that (though quite late) than "early 18th" as labeled on plate 27; while both candelabra illustrated at the bottom of plate 18 are labelled F 142, that number is correct only for the one at lower left, while the one to the right is F 157; on p. 137, under F 273-4, the reference to F 299 as by Joubert is incorrect, for on pp. 147f. the latter's attribution to one or another of the Foulet family is established; and finally, in the glossary, on p. 267 that type of *canapé* is a "veilleuse," and on p. 269, the top of the back of a "voyeuse" is usually, at least in this writer's experience, upholstered.

The length of time required merely to see a book of this sort through the press produces, unfortunately, the result that it can never be quite so up-to-date as the numerals on the title-page indicate. The bibliographical apparatus, for example, does not appear to carry beyond 1954; certainly there appears none of the important publications of 1955 (we must cite Verlet's two invaluable handbooks for the series "L'Oeil du Connaisseur," for example). Whether for this reason or for others, it is particularly unfortunate, in view of the definitive nature of his work, that Mr. Watson is unable to refer in his discussion of the enigmatic "B.V.R.B." to the solution to this problem which has been found by M. Claude Baroli, since, although publication of this important discovery has been subject to maddening delays, M. Verlet has been able at least to allude to it in one of the books just cited.

Such matters, of course, will be insignificant in a very few years in any case. The Catalogue has its greatest importance in the documentation of the Wallace's magnificent collection. We should not wish to overlook, however, the brilliant chapter on the history of collecting taste which is embodied both in Mr. Watson's foreword and in notes under individual pieces. If, as we stated at the outset, the Wallace Collection can be called one of the very few greatest collections of French furniture, its position is unique in this rarefied company in the fact that it was "collected": for its nearest competitors, the Louvre and the Residenz in Munich, have collections which are basically residual in character. Although the Louvre has

been able to acquire a number of important items in recent years, the glories of its collection are the ones which somehow survived in the possession of the French state, for the most part buried away in ministries and subordinate offices, whence they have been harvested in the last few decades. The Wallace, on the other hand, was the work of a dynasty of dedicated collectors, true lovers of beautiful things, who brought them together in the nineteenth century when (at first) interest in such treasures was at its lowest. The part played by the fourth Marquess of Hertford and by his son in reviving such an interest is far from the least interesting aspect of the matter.

Rare, indeed, is the family in which the collecting bug, in its most virulent form, is passed on through three consecutive generations; and this is especially remarkable in a series of such strongly individual personalities as the Marquesses of Hertford. Their real start in collecting was made by the third Marquess (1777-1842), an intimate of the Prince Regent, who helped the latter acquire French furnishings for Brighton Pavilion and his other pleasure-seats, and incidentally assembled a fine collection of his own. This collection was not, however, gathered for anything but private enjoyment; it was dispersed after the third Marquess' death, largely when his friend the Countess Zichy, to whom he had left his villa of St. Dunstan's in Regent's Park, sold its contents in 1850; the fourth Marquess, then living in Paris (the oncoming Victorian era was too stifling in England to interest this product of an earlier and gayer age in living there), instructed his agent to purchase some items of family interest from this sale, and a few of these are among the furniture today in Hertford House (see pp. xiif.).

This fourth Marquess (1800-1870) was already forming a new collection, this time as an assemblage for preservation and perpetuation, buying avidly in Paris and anywhere else that works to his taste were coming on the market. Mr. Watson makes the interesting observation that the Marquess must have been acting frequently on private sources of information, in view of his remarkable success in acquiring what have proven to be pieces from the royal collections; for after all, a number of the *ébénistes* themselves lived on well into the years of his own majority, and the *ciseleur* Pierre Philippe Thomire died as late as 1843. An English milord would scarcely have known these craftsmen directly, of course, but accurate information on surviving pieces from the Old Regime must have been plentiful in the years when Lord Yarmouth, the future Marquess, was learning the art of collecting. It is interesting to note too, as Mr. Watson does on pp. 265f., that it was Lord Hertford's sincere love for the beauty of these fine things, rather than the mere greed for possession, which caused him to have copies made of outstanding pieces, such as the Desk of Louis XV, which he could never hope to own.

On his death, the fourth Marquess left his collections, contained principally in his Paris quarters at Bagatelle and in the rue Lafitte, and at Hertford House in London, to his illegitimate son, Richard Wallace

(1818-1890), who had long been active as a collector in his own right. (It is amusing to note that, before Sir Richard's parentage could be generally acknowledged, speculation had even reached the suggestion that, in view of the closeness of their ages and the known independence of spirit of the third Marchioness, he and Lord Hertford might have been half-brothers.) Sir Richard, who was knighted for his extraordinary services during the Siege of Paris in 1871, moved more of the collection, including many of the things he himself had acquired, to London, but maintained the Paris residences in all their glory as well. It was the part of his collection housed in Hertford House which was left to the British nation by Lady Wallace in 1897, and opened to the public in 1900. Since then it has been one of the treasures of London, rejoicing in all the advantages and all the disadvantages of a closed public collection, to which nothing may be added nor subtracted.

There is a particular interest to the Wallace Collection for American students, not only in its present splendid possessions, but because of the fact that much of what did not pass to Britain came instead to this country. The Paris properties and their contents were left by Lady Wallace to Sir John Murray Scott. When Bagatelle was sold to the city of Paris in 1906, the remaining furnishings were concentrated in the rue Lafitte apartment, whence they were disposed of by Sir John's heiress, Lady Sackville, to (or through) Jacques Seligmann et Cie. While a few pieces remain in Paris, notably in the Musée Nissim de Camondo, many more may be seen in the Metropolitan Museum, the Huntington Library, the Cleveland and Philadelphia Museums, and elsewhere in this country, as tributes of a later generation of wealthy collectors to the sagacity of the Hertfords.

Undoubtedly a great deal of fresh information will be available with the publication of Mr. Germain Seligmann's long-awaited biography of his father; but in the meantime, the present writer can add a few footnotes to the subject of the Wallace Collection in America. One is to the effect that, although several writers have alluded to the fact that the Frick Collection was one of the benefactors of the Paris dispersal, and although H. C. Frick did purchase Wallace items, none of these pieces, Mr. Franklin Biebel assures me, has passed into the present Frick Collection in New York. Similarly, the Walters Art Gallery, whose founder was also a major customer of Seligmann's, now owns only seven ex-Wallace items: three bronzes, three sculptures (the most important a small Clodion terra cotta), and a clock with a case by Lieutaud. A number of other pieces are identified as coming from the Wallace Collection in the catalogue of Mrs. Henry Walters' sale at Parke-Bernet in 1941.

Our last footnote supplements Mr. Watson's note on the candelabrum F 140 (pp. 89f.), decorated with a miniature bronze of Falconet's "L'Amour Ménacant"; he remarks that a Fragonard painting also in Hertford House, No. 430, "The Swing," also contains a representation of this very popular subject. The fact is that the Collection once contained still a third exam-

ple, a full-sized Falconet bronze, sold by Seligmann with two other ex-Wallace bronzes to W. A. Clark and now in the Corcoran Gallery in Washington.

Finally, it is for an example worthy of emulation that we must look at the Wallace Collection, in its past history as in its present estate. It is frequently stated that the day of the great private collector has, with a few exotic exceptions, passed, and that his place has been taken by the directors and curators of public institutions. This may be true, but unfortunately the second type of "collector" cannot be an entirely adequate replacement for his predecessor. The example of Lord Hertford shows us how the private collector of confirmed taste may act, simultaneously before and behind his time, to rescue from oblivion—and probable destruction—the arts of a neglected period temporarily out of fashion. Indeed, the fourth Marquess' purchases in the 1840's and 1850's played no small part in stimulating the revival of interest in the eighteenth century which is noticeable from the time of the de Goncourts on, and which reached some sort of preliminary apogee in the 1880's. Yet such a program of acquisition is all but impossible to the public servant, since, in all but a tiny proportion of our museums, he is so accountable to "public taste" as to be almost incapable of making important acquisitions outside the area of the fashion of the moment, whatever his personal tastes and/or perceptions may be. It would seem that the need for such private collectors as Lord Hertford has far from ceased; whether any of them, even in far less magnificent circumstances, may still exist, remains to be seen.

JAMES D. BRECKENRIDGE  
*The Baltimore Museum of Art*

THOMAS MUNRO, *Toward Science in Aesthetics*, New York, The Liberal Arts Press, 1956. Pp. 363. \$5.00.

THOMAS MUNRO, *Art Education: Its Philosophy and Psychology*, New York, The Liberal Arts Press, 1956. Pp. 387. \$5.00.

These two companion volumes of essays are an impressive contribution to the themes indicated by their titles. Wide in scope, rich in ideas, they present the thought, over a period of thirty years, on aesthetics and education in art by a distinguished scholar.

Collections of essays, such as these, enable the reader to examine interesting variations in the handling of the several subjects under consideration. Inevitably, however, the individual essays differ considerably in length and in significance. Furthermore, they risk the disadvantages of repetition and overlapping. Although the author, as he states in a preface, has revised and coordinated, added and cut his material in order to avoid these disadvantages, they are nonetheless present. The following analysis of Dr. Munro's chief ideas will therefore suggest what seem to be the most rewarding statements of the issues at hand.

*Toward Science in Aesthetics* considers "various

aspects of the present transition of aesthetics toward scientific status" (p. viii). The first two essays in the volume, which are by far the longest, deal most directly and forcefully with this central conception of scientific aesthetics. The first of these, originally published in 1928, is called "Scientific Method in Aesthetics"; the second, "Aesthetics as a Science: Its Development in Europe and America," appeared in its original form in 1951. Now the idea of a scientific aesthetics will seem to many readers a strange one. What does Munro mean by this? In illuminating discussions in both essays, he urges that aesthetics renounce its old metaphysical, normative status, with its theoretical, abstract controversies, its emphasis upon absolute standards, and its search for laws of beauty. Instead, aesthetics should be considered a field of investigation that is tentative and flexible, concrete and experimental. It should be based upon careful, controlled, and extensive observation of aesthetic phenomena—for example, upon a direct study of works of art and their effects upon observers. Thus understood, aesthetics is scientific, provided one comprehends by scientific method not a primary concern with logical proofs or quantitative measurements, but rather with descriptive observations which are, to a degree, publicly verifiable. These conceptions of scientific method and of aesthetics as a science—here crudely summarized—are based upon a philosophy which is empirical, humanistic, and naturalistic.

This "naturalistic humanism," according to which "nothing can be intrinsically good . . . except good experience, good conscious living" (p. 249), is also a basic foundation and support for the author's related analyses of valuation and value standards. These stimulating analyses, which further amplify and elucidate the fundamental idea of aesthetics as a science, occur, in varying forms, in essays one, two and seven of *Toward Science in Aesthetics* and in essay five of *Art Education*. As one would expect, Munro vigorously attacks the absolutist view of value according to which true or right values inhere in objects. He observes, in the first essay, that "there is no such thing as a completely objective valuation of a work of art," and that "aesthetics must abandon this ancient craving for a monistic solution" to valuation and standards (pp. 73, 83). In the second, much later, essay we read: "It is a naïve survival of primitive thinking when the critic projects his own emotional responses into the outside world and assumes that things are really good or bad in themselves, in accordance with his likes and dislikes" (p. 102). Standards and values, on the contrary, are relative to varying responses. They are "products partly of varying social environments, and partly of individual differences" (p. 51). Recognizing the significance of the interaction between a work of art and the observer, Munro asserts that greater understanding of valuation will only result from a "combination of form-analysis and self-analysis" (p. 73). And he further urges that all phenomena related to aesthetic values should be examined in a descriptive spirit with emphases upon careful observation and factual investigation.

In warm agreement with this challenge to absolutism and with portions of the positive aspects of the foregoing theory, this reviewer nonetheless believes that Munro leans too far in the direction of subjectivism. To be sure, Munro rejects "pure subjectivity" in the sense that values are wholly independent of an object; and he of course believes that some works of art and some observers are superior to others. Yet his approach is so entirely descriptive that any theoretical basis for aesthetic valuations of better and worse seems impossible. It leaves no place for reasoned normative judgments and thus leads to the subjectivist position: *de gustibus non disputandum est*. Consider, for example, this statement from the second essay: "One may recognize that a certain kind of taste is motivated by juvenile attitudes, limited experience, neurotic conflict, or temporary passion inconsistent with the individual's more stable character configuration. *This does not mean that it is bad taste . . .*" (p. 104; my italics). Contrary to this conclusion, one should rather consider the reasons given for the taste in question—juvenile attitudes and so forth—as a paradigm of causes of bad taste. Similarly, certain qualities of works of art—technical weaknesses, disorganization, sentimentality and the like—are genuine defects. Although Dr. Munro, in his volume on art education, defines "good taste" (p. 8) and names qualities by which he grades students' work, his thoroughly descriptive approach toward valuation logically prohibits critical distinctions of good and bad. In short, he is reluctant to accept "relativism," the only value theory which avoids the absurdities both of absolutism and of subjectivism.

"Scientific Method in Aesthetics," the first long essay, also contains sections on *Form* and on *Aesthetic Psychology*—subjects which are treated more fully, however, in other essays. Although "Aesthetics as a Science," the second essay, does not treat those subjects, it discusses more effectively and clearly than does the earlier essay the problems so far outlined. And it contains, in the concluding sections, significant pages on the much disputed matter of the meaning of aesthetics and of related disciplines.

Thus the American conception of aesthetics, we are told, has in recent years broadened remarkably. Whereas in 1941 the author had written, "Aesthetics is still commonly regarded in the traditional way as 'the branch of philosophy dealing with beauty'" (p. 154), in 1951 he states: "It (aesthetics) is branching out vigorously to include more study of the arts themselves, as well as of theories about them. It is now commonly conceived as the subject which seeks to *describe and explain, in a broadly theoretical way, the arts and related types of behavior and experience . . .* Aesthetics covers also the more philosophical areas of art criticism, of the psychology of art, of the sociology and ethnology of art . . ." (pp. 134-135). In the concluding sections of this essay, the author briefly discusses what he considers to be the most acceptable meanings of "different approaches within the total field" or on the "outer boundaries" of aesthetics: that is, "the philosophy of art," "the criticism of art,"

"experimental aesthetics," "Kunstwissenschaft," and so forth. This discussion is a rewarding contribution to puzzling problems of semantics. Because of it, one may hope for greater agreement in the future concerning terminology and interpretation.

Dr. Munro, then, specifically recognizes the need "to define crucial terms clearly and acceptably" (p. 187). Yet in the fourth and fifth essays which deal with the morphology of art (that is, a detailed, analytical observation of works of art), he does not wholly achieve this goal. "Form in the Arts," the more complete and important of the essays, seems in certain respects semantically misleading. To be sure, the key definition given to artistic form—that of organization of various kinds—is now widely accepted and is invaluable in aesthetic and critical analysis. Our author's interpretation of form as organization, however, is puzzling. In the section of the essay which discusses *presentation* and *suggestion* as "the two modes of transmission by which a work of art is conveyed to the apperceptive mechanism of an observer" (p. 161), the idea of form as organization is largely ignored. Suggestion is described in terms of such "various modes" as imitation, symbolism, and common association (p. 162). But what have these to do with artistic organization? Suggestion, it would seem, is an aspect, not of artistic form, but of artistic content. This conclusion is indicated by the author himself when he uses, as he often does, the phrase "suggestive content" instead of "suggestion." Nowhere, however, is content distinguished from form, nor is "content" in the index. When "suggestive content" indicates "an arrangement of meanings," this arrangement is indeed one kind of artistic form—the kind brilliantly discussed by Walter Abell in *Representation and Form* as "associative form." But Munro only mentions this meaning (p. 163). Moreover, the inclusion of the "ingredients" of works of art, by which the author primarily means materials and subject matter or "ideas" (p. 184), under "form" is also confusing. These ingredients become form only *after* they have been artistically organized. Thus, the useful and satisfactory analysis of works of art into the three major categories of Matter, Form, and Content, as described, for example, in T. M. Greene's *The Arts and the Art of Criticism*, is ignored.

"Modes of Composition in Art," the sixth section of "Form in the Arts," considers composition under four headings: utilitarian, representative, expository, and thematic. Much of the discussion is interesting, thoughtful, provocative. Nonetheless, many readers will conclude that composition, in Munro's senses, is too sweeping a concept. Material is included which seems unrelated to artistic composition in its more usual meanings. "A coat of arms involves expository composition in that it undertakes to convey general facts about the owner's rank and privileges in feudal society, and perhaps about his ideals and the accomplishments of his family" (p. 173). Because Munro is convinced that the realm of art is so vast in scope as to include "carpentry, city planning, horticulture, animal-breeding,

cosmetics, and even plastic surgery . . ." (p. 228-229) and because he is deeply concerned with interrelations between the arts, such a category as artistic composition becomes complex in the extreme. Some of us will conclude that artistic concepts tend to be more meaningful when they are applied to smaller fields of investigation.

Artistic "styles," well defined in a broad way as "dynamic, complex trends" (p. 179), are analyzed in the sixth essay. This essay, which comprises no fewer than fourteen main headings and numerous subheadings, is too involved to be readily absorbed. Many readers will be bogged down by its elaborateness and will feel that parts of it are somewhat obvious, arbitrary, or redundant. Its considerable value lies in the fact that it well shows the complexity of stylistic problems and offers illuminating suggestions to teachers and students for various kinds of study.

The eighth essay: "The Concept of Beauty in the Philosophy of Naturalism," which was first published in 1955, handles admirably a subject of first importance for aesthetics. In his opening section the author necessarily restates the significant fact that the words "beauty" and "beautiful," which until recent years were the key terms in aesthetics, are now in disfavor "among art critics, historians, and philosophers who aspire to scientific method or objective scholarship" (p. 262). This semantic revolution has occurred because "even in those branches of aesthetics and criticism where evaluation is the main concern, such ancient terms as 'beauty' have come to seem hopelessly vague, ambiguous, and controversial" (p. 263). Munro next presents crucial facts, relating to "beauty" and other evaluative terms, which should henceforth be better known than they are and more generally accepted. Direct quotation will best elucidate some of these ideas: "Defining beauty is in part a verbal problem of semantics, logic, and lexicography. . . . In part, it is also a problem of ascertaining and demonstrating the truth about the things to which this word refers: about the qualities in art and experience which have been called 'beautiful.' . . . From the standpoint of empiricism, there is a tacit error in asserting that 'beauty is' any particular thing or quality, objective or subjective, natural or transcendental, with the implication that beauty is and can be this alone. . . . The only short, simple, correct answer to the question 'what is beauty?' is to say, 'beauty is many different things, not yet well understood, to which the name "beauty" has been applied'" (pp. 264-265). Later in the essay Munro gives a rewarding set of definitions of "beauty," which he calls "the modest task of restating the chief current meanings in terms of naturalistic psychology, and rearranging them so that the alternative senses will be clear" (p. 289). His conclusion that the preferable senses of "beauty" are broad ones "to express admiration for a visible or other object" (p. 292) is an emphatic rebuttal to those hopeless philosophical efforts to find the essence of beauty.

The last three essays in this volume require only brief comment. "Aesthetics and the Artist" considers,

as the title suggests, various possible and desirable relations between artistic creation and the new "scientific" aesthetic attitudes. "The Place of Aesthetics in the Art Museum" treats a number of subjects that concern art museums: for example, their organization and equipment, the exhibiting and acquiring of works of art. "The Afternoon of a Faun and the Interrelation of the Arts" discusses connections between the work in question in different media and gives the reader an intimation of the kind of study the author proposes to assemble in a future volume of essays.

*Art Education: Its Philosophy and Psychology* includes no fewer than twenty-five essays. Varied subjects, all related to the large, main theme, will be grouped in this review under a few headings. General considerations concerning education in art form the chief content of essays one, two, and sixteen, which are respectively entitled: "Aesthetic Education as a Part of General Education"; "Some Basic Problems in Art Education"; and "The Role of Fine Arts in a Liberal Education." The wealth of stimulating suggestions and ideas in the first two essays can only be suggested here. Dr. Munro's philosophical approach to education in art is based upon "modern liberal humanism," which, opposing all forms of dogmatism, stresses tentative, experimental aims and methods. The author also opposes over-specialization of any sort. "In teaching the history of art, we wrongly assume that specialization must be in terms of time and place. . . . In modern education, many other kinds of specialization are important. One can specialize on the general, theoretical approach to art. In art history, one can specialize upon the relations between art and some other factor in civilization, such as religion or economics. . . . Education is trying to develop new syntheses, new borderline or interdepartmental studies, new ways of selecting and interrelating activities and subject matter in art" (p. 20). In his interesting discussion of "the preparation of the art teacher" (pp. 30-34), Munro stresses the "dislocation" which results from excessive differentiation in kinds of art instruction at the various levels of education. Greater continuity, he argues, is the solution to this difficulty. The sixteenth essay deals with some of these same problems and with other related ones: for example, the desirability of combining and coördinating the practice of art with the history of art. Though familiar, this idea still requires discussion because of the reluctance on the part of many historians of art to accept it.

Psychological aims, objectives, and methods in art education play an important role in this volume. These are considered most fully in the third essay, "A Psychological Approach to Art and Art Education," which well exemplifies the breadth and flexibility of the author's reasoning. His approach "regards teaching in all subjects, on all age levels, as an attempt to *develop abilities* rather than to convey an inert mass of knowledge . . . too often we teach art without asking how we can best develop the power to think and imagine artistically—to create and appreciate art" (p. 36). Thus, *pace* the widespread contrary assumption, both

creative ability and art appreciation can be taught. To attain greater success in achieving these goals, we need "more careful systematic study and experiment in the psychology of art—not in isolation, but in relation to general psychology" (p. 37). In his typically open-minded way, Munro admits that psychological studies of aesthetic phenomena have not as yet accomplished much. Before they can progress far, difficulties of various kinds, which he discusses, must be overcome. Another section of the essay considers main determinants of ability in art: hereditary and environmental ones. Of great importance in the psychology of art, moreover, is the further question of individual aesthetic development: what should children of various ages, that is to say, be able to create or appreciate? Does an education in art based upon a chronological scheme satisfy a "normal" individual development? In order to answer these and many other questions which the author raises, "the main requirement is to bring psychology and art into closer contact" (p. 66).

Other essays also consider varied aspects of the psychology of art. "Methods in the Psychology of Art," the ninth essay, ably analyzes and criticizes leading treatises on aesthetic psychology: in particular those of Fechner, Müller-Freienfels, and Plaut. The first essay—Munro's most recent one—begins with a section called "The Psychological Approach." And in the section of the sixteenth essay called "Psychological Objectives of Art Education," one of the author's primary contentions is strongly restated thus: "Historians have too long deluded themselves and others with the easy disclaimer that 'appreciation cannot be taught.' It can be taught, and only the indifference of many college art professors to the educational and psychological aspects of their work prevents them from seeing how it can be taught" (p. 306). It is evident, then, that psychological aesthetics plays a major role in Munro's thinking. Whether or not one wholly agrees with him—either in individual ideas or in the large significance he gives to this general field of study—his explanations of the psychology of art and his defense of it are indubitably expert and forceful.

*Creative ability and aesthetic ability* (that is, powers of art appreciation and evaluation) are discussed in the fourth and fifth essays. Because some of Munro's ideas about aesthetic ability were outlined in an early part of this review, here one need only point to the section of the fifth essay which considers the relation of appreciative ability to creative ability. Granting the help which the practice of art contributes in *some* ways to appreciation and understanding, the author nonetheless challenges, in various ways, the "absurd" idea that creativity or participation in the production of art is essential to full appreciation. His discussion of creative ability in the fourth essay has a psychological slant which allies it with essays already considered. The discussion revolves around questions like the following: what is the relation of creative ability to "concentration or channelizing of interest" (p. 88)? what is the connection between artistic creativeness and inward neurotic conflict? what are the specific components of

creative ability? Answers to these and similar questions will of course vary greatly because of differing circumstances and differing personalities. Munro's educational and psychological interests lead toward broad solutions to the problems raised. The following typical conclusion may be quoted: "College courses tend to overemphasize intellectual study and verbal memory; art academies, to overemphasize manual technique. All along the line, for both general education and professional training, more effort should be made to deal with those other mental and emotional factors the development of which is necessary for maximum creative and appreciative ability" (pp. 102-3).

Only mention need be made of essays six, seven, and eight in which the relations of education in art to culture, "world-mindedness," and "international understanding" are considered. Such familiar matters as the following are discussed: the ways in which art reflects culture; the connections, favorable and unfavorable, between artistic creation and ideals of world unity; the possibilities of cultural exchange between nations; and the selection and organization of "the artistic elements in the world's cultural heritage for transmission to youth" (p. 169).

Specific methods of education in art constitute the substance of many of the following essays. The earliest of these—twelve and thirteen, published in 1925 and 1926—analyze and oppose the methods of "free expression" and of "logical synthesis" as they were taught by Franz Cizek and Arthur Dow. The tenth essay deals largely with various kinds of "art tests." Those which purport to measure accurately aesthetic judgment and to value artistic capacities correctly are effectively condemned. Their assertions are unjustifiable. To what sort of tests, then, of appreciation and of creative ability may one reasonably subscribe? Munro's recommendations are so sensible and sound that few educators nowadays would challenge them. For instance, he urges that "when we grade, let us not be content with arbitrary, undefended judgments, but rather persist in trying to think out and express what our standards are, and the reasons for them" (p. 194). And he finds "only one general way to grade students' art work fairly on a basis of creative ability. It requires that the teacher himself shall have learned to appreciate many different kinds of art . . . this will help him to recognize many different kinds of value in students' work, and keep him from grading them all in terms of approximation to one kind of art or one narrow set of principles" (p. 199). To improve all of our methods of teaching art, we urgently need "the accumulation of definite, tested, controlled experience"—the kind of experimentation and tabulation, that is to say, which exemplifies "scientific" aesthetics (p. 207). The eleventh essay, "Children's Art Abilities," is, in the main, a descriptive account of the kinds of tests and grading, and of experimentation and tabulation which have been held for many years at the Cleveland Museum of Art. A major aim of this work has been an attempt to estimate the normal artistic development of children. Essay fourteen, "Adolescence and Art Education," explains

the difficulties in teaching art to high school students and offers provocative suggestions for its improvement. The acuteness of the problem, as he understands it, may be indicated by these statements: "How lamentable, then, is the failure of our schools and museums to take advantage of this period of enormous aesthetic vitality! The one age level which above all others should be sympathetic to art now seems farthest alienated from it" (p. 262). How applicable, one may ask, is this view, first written in 1932, to the situation as it exists today?

From three different standpoints, Munro considers education in art at the college level. In the seventeenth essay he points to weaknesses in the teaching of the history of art which, unfortunately, seem as prevalent now as they were twenty-five years ago. All too frequently, for example, the teacher will include value judgments "only incidentally and carelessly, with a casual dogmatism that conceals and ignores debatable issues, confusing them with verifiable facts" (p. 314). How often, alas, has this reviewer heard famous scholars do just this! To prevent this baneful avoidance of discussions of aesthetic issues, Munro would include in college art teaching—in addition to and through the history of art—studies in comparative aesthetics, in the psychology of art, and in the sociology of art. In the eighteenth essay the author discusses the meaning of "aesthetics," somewhat in the way in which he treats it in the second essay of *Toward Science in Aesthetics*: its relation to philosophy and other disciplines, and its rightful place in the college or university curriculum. And in his nineteenth essay, he presents an elaborate and ideal college program for aesthetics and the arts.

The six concluding essays in this volume all deal with the problems of museums. Numbers twenty and twenty-four, originally published in 1933 and 1934,

are cursory treatments of educational functions of museums and of art museum work and training. Because the material is now so well known, one may question the advisability of including these papers in a collection of "selected essays." Numbers twenty-two and twenty-three, published in 1936 and 1937, discuss the relation of the art museum to children and to students in secondary school. These subjects are evidently of special interest to the author and are handled with distinction and authority. In response to his provocative suggestions some readers will nonetheless be tempted to ask: how artistic or aesthetic can the museum experiences of children and of adolescents be? Essay twenty-five, published in 1951, considers briefly the relation between the art museum and creative originality. Essay twenty-one, published in 1952 and entitled "Aims and Method in Art Museum Education," is the most comprehensive and substantial of this group. Such topics as the following are discussed: the various services which the museum renders in the cultural life of the community; the tasks and problems of the museum educator; the desirability of having in the museum many different arts, for educational purposes; and the proper emphasis upon quantity and quality.

If one attempts to read either of these volumes right through from cover to cover, one will receive the impression of repetition. The reader, it is suggested, should dwell on those essays that most satisfactorily expound the themes of special concern to him. This review attempts to steer him in this direction. Wherever he reads, he will be impressed by an attitude that is refreshingly modest and fair, and by thinking that is liberal and penetrating.

BERNARD C. HEYL  
Wellesley College

## LIST OF BOOKS RECEIVED

BAUR, JOHN I. H., *Bradley Walker Tomlin*, New York, Macmillan (for the Whitney Museum of American Art), 1957. Pp. 62; 20 pls.; 5 color pls. \$4.00.

BUCHER, FRANÇOIS, *Notre-Dame de Bonmont und die ersten Zisterzienserabteien der Schweiz*, Bern, Benteli-Verlag, 1957. Pp. 280; 73 figs. \$6.85. (Berner Schriften zur Kunst, VII)

CELEBONOVIC, STEVAN, *Old Stone Age*, New York, Philosophical Library, 1957. Pp. 96; 72 pls. \$10.00.

Ceylon, *Paintings from Temple, Shrine and Rock*, with preface by W. G. ARCHER and introduction by S. PARANAVITANA, Greenwich, Conn., New York Graphic Society (UNESCO World Art Series), 1957. Pp. 28; 4 pls.; 32 color pls. \$16.50.

CHIBA, REIKO (ed.), *Hiroshige's Tokaido in Prints and Poetry*, Rutland, Vt., Charles E. Tuttle Co., 1957. Pp. 68; 55 color figs. \$2.50.

GARLAND, MADGE, *The Changing Face of Beauty*, New York, M. Barrows & Co., 1957. Pp. 224; many figs. \$10.00.

HUTH, HANS, *Nature and the American; Three Centuries of Changing Attitudes*, Berkeley, University of California Press, 1957. Pp. 250; many figs.; 64 pls.; 1 color pl. \$7.50.

JANSON, H. W., *The Sculpture of Donatello*, Princeton University Press, 1957. Pp. 260; 512 pls. \$40.00.

KANTOROWICZ, ERNEST H., *The King's Two Bodies; a Study in Mediaeval Political Theology*, Princeton University Press, 1957. Pp. 568; 32 figs. \$10.00.

KUHN, CHARLES L., *German Expressionism and Abstract Art*, Cambridge, Mass., Harvard University Press, 1957. Pp. 151; 218 figs.; 1 color pl. \$8.75.

LEISINGER, HERMANN, *Romanesque Bronzes; Church Portals in Mediaeval Europe*, New York, Frederick A. Praeger, 1957. Pp. 9; 160 pls. \$13.50.

LINDSTROM, MIRIAM, *Children's Art; a Study of Normal Development in Children's Modes of Visualization*, Berkeley, University of California Press, 1957. Pp. 100; 57 figs.; 8 color pls. \$1.50.

LOTHROP, S. K., W. F. FOSHAG and JOY MAHLER, *Pre-Columbian Art; Robert Woods Bliss Collection*, New York, Phaidon Publishers Inc. (distributed by Garden City Books), 1957. Pp. 65; 270 figs., of which 165 in color. \$30.00.

MARLIER, GEORGES, *Ambrosius Benson et la peinture à Bruges au temps de Charles-Quint*, Brussels, Editions du Musée Van Maerlant, 1957. Pp. 343; 155 figs.; 2 color pls. 525 Belgian francs.

MARSYAS; *Studies in the History of Art*, VII, 1954-57, New York, published by the students of the Institute of Fine Arts, New York University, distributed by J. J. Augustin, 1957. Pp. 79, 47 figs. \$5.00.

MAY, FLORENCE LEWIS, *Silk Textiles of Spain, Eighth to Fifteenth Centuries*, New York, The Hispanic Society of America, 1957. Pp. 286; 161 figs.; 6 color pls. \$14.00.

MYERS, BERNARD S., *The German Expressionists*, New York, Frederick A. Praeger, 1957. Pp. 401; many drawings; 238 figs.; 36 color pls. \$15.00.

PLACE, ROBIN, *Finding Fossil Man*, New York, Philosophical Library, 1957. Pp. 126; 81 figs. \$7.50.

Répertoire d'art et d'archéologie, LVIII (1954), Paris, Société des amis de la bibliothèque d'art et d'archéologie, 1957. Pp. 451.

SELZ, PETER, *German Expressionist Painting*, Berkeley, University of California Press, 1957. Pp. 379; 180 pls., of which 37 in color. \$18.50.

STEEGMAN, JOHN, *A Survey of Portraits in Welsh Houses: I, Houses in North Wales*, Cardiff, National Museum of Wales, 1957. Pp. 362; 47 pls. £2/10/-.

Sveriges Kyrkor: Uppland, VI, 3, Stockholm, Generalstabens Litografiska Anstalts Forlag, 1957. Pp. 512; 498 figs. 17 Swedish crowns. (Vol. 79 of the Swedish art historical inventory)

TIETZE-CONRAD, E., *Dwarfs and Jesters in Art*, New York, Phaidon Publishers Inc. (distributed by Garden City Books), 1957. Pp. 111; 90 figs. \$5.50.

Treviso, Palazzo dei Trecento, *Mostra Canoviana*, catalogue ed. by LUIGI COLETTI, Treviso, 1957. Pp. 134; 49 pls. 1500 lire.

YAMANOBÉ, TOMOYUKI, adapted by Lynn Katoh, *Textiles*, Rutland, Vt., Charles E. Tuttle Co., 1957. Pp. 70; 21 color figs.; 27 pls.; swatches of dyes. \$3.00. (Arts & Crafts of Japan, 2)

## NOTES FOR CONTRIBUTORS

1. Manuscripts should be submitted to the Editor of THE ART BULLETIN. Contributors are advised to retain an accurate carbon copy of their articles.

2. All manuscripts must be typewritten and double-spaced, on one side of the paper only, on sheets of uniform size (preferably 8½ x 11 inches) and regular weight, numbered consecutively.

3. Footnote references in the text should be clearly designated by means of superior figures, placed after punctuation.

4. Footnotes should be numbered consecutively and typed double-spaced on separate pages subjoining to the article.

5. Legends for plates should be typed on separate pages and should be stated as briefly as possible. For example:

1. *Enemy herdsman on horseback*. Rome, Vat. ms gr. 549, ix cent. (Courtesy Museum of Art, Rhode Island School of Design)
2. *Roman Sarcophagus, Death of Meleager* (detail). Paris, Louvre (photo: Anderson)
3. *Castiglione, Crucifixion*. Genoa, Palazzo Bianco (photo: Frick Reference Library)

6. Good photographs made directly from the work to be reproduced are essential, and whenever negatives of these are available, they should be submitted also. All photographs and negatives will be returned. If better copy for any illustration exists in a book or manuscript not available to the contributor, this information should be noted in a full bibliographical reference and included with the photograph. Contributors are urged to consult the Note by Clarence Kennedy, "The Selection of Copy for Illustrations," *ART BULLETIN*, XXXI, 1949, pp. 135-138. For a copy of the reprint, write the Managing Editor.

7. Each photograph or drawing should be clearly marked with its figure number on the reverse. Marking should be done lightly with a soft pencil. Do not type or write heavily; the marks will show through on the finished plate. If only part of the illustration is required, the area to be reproduced should be outlined lightly in pencil on the reverse side.

8. Permission for the use of Alinari photographs will be cleared by THE ART BULLETIN, but contributors are responsible for obtaining permission, whenever necessary, for the reproduction of other photographs.

9. Drawings should be in India ink on white drawing paper.

10. Words, phrases, passages, or titles intended to be printed in italics should be underlined in the typescript. This includes titles of works of art, titles of books, poems, and periodical publications, and technical terms or phrases not in the language of the article; but does not include direct quotations in a foreign language, foreign titles preceding proper names, place names, names of buildings, or words anglicized by usage.

11. Italicize: *ibid.*, *idem*, *op.cit.*, *loc.cit.*, and *passim*; but not: *ad loc.*, *cap.*, *circa* (*ca.*), *et al.*, *infra*, *q.v.*, *sae*, *scilicet* (*scil. or sc.*), *sub voce* (*s.v.*), *supra*, *versus* (*vs.*), *vide*; nor: *cf.*, *col.*, *e.g.*, *etc.*, *ff.* (*following*), *fol.*, *fols.*, (*folio*, *folios*), *i.e.*, *l.*, *ll.* (*line*, *lines*), *p.*, *v.*, *vv.* (*verse*, *verses*), *viz.*

12. In citing from periodicals, the title of the article should be in roman within double quotation marks, and the title of the periodical in italics. Thus:

Adolph Goldschmidt, "The Decoration of Early Mainz Books," *Magazine of Art*, XXX, 1938, pp. 579-581.

13. In the case of books cited, the form of reference should be as follows: (1) author's name, preceded by his given name or initials, and followed by a comma; (2) title, italicized, followed by a comma; (3) the edition where necessary, followed by a comma; (4) place of publication, followed by a comma; (5) if desired, the name of publisher, followed by a comma; (6) date of publication, followed by a comma; (7) reference to volume in Roman numerals without preceding "Vol." or "V." and followed by a comma; (8) page or column number, preceded by "p.," "pp." or "col.," "cols." Thus:

Mary H. Swindler, *Ancient Painting*, New Haven, Yale University Press, 1929, p. 60.

Charles Diehl, *Manuel d'art byzantin*, 2d ed., Paris, Librairie Auguste Picard, 1925, II, pp. 72-78.

14. In English titles of publications, capitalize all principal words; in Latin, in addition to the first word, capitalize proper nouns and adjectives derived therefrom; in French, Italian, and Spanish, in addition to the first word, capitalize proper nouns but not the adjectives derived therefrom; in German, capitalize all nouns but not the corresponding adjectives, except those derived from names of persons.

15. Upon first reference, titles and bibliographical data should be given amply as in paragraphs 13 and 14. In all succeeding references, the shortest intelligible form should be used. Such abbreviations as *ibid.*, *loc.cit.*, and *op.cit.* should not ordinarily be used to refer farther back than the preceding page.

16. All references should be verified before the manuscript is submitted for publication. Articles that are incomplete in this respect will be returned to the author for completion.

17. The funds of THE ART BULLETIN do not admit of an expenditure of over ten per cent (10%) of the cost of composition for alterations in articles once set up in galley proof. In order that contributors may be spared the expense of exceeding this allowance, they are urged to prepare their manuscripts as nearly as possible in conformity with the above rules. In cases of doubt as to form, contributors are referred to *The MLA Style Sheet*, obtainable from the Modern Language Association.

18. Book reviews should be prepared in the same style as other contributions to THE ART BULLETIN. Book reviews represent solely the opinions of the reviewers, who have complete freedom, within the limits of scholarly discourse, to set forth their own evaluations of the publications assigned to them for review. In order to ensure maximum usefulness, it is desirable that every review include a factual description of the contents of the work under review, as distinguished from the reviewer's critical estimate of its merits. (THE ART BULLETIN will not consider unsolicited manuscripts for book reviews.)

19. Any letter to the Editor which comments on a contribution to THE ART BULLETIN is submitted to the author of the contribution in question in order to permit a letter in reply to be published concurrently if desired. Writers of letters to the Editor are therefore requested to enclose a carbon copy.

20. Authors of articles will receive fifty offprints free of charge. Authors of Notes will receive thirty offprints of the Notes section free of charge. Thirty copies of the whole back section will be sent free of charge to authors of Reviews of Books and Exhibitions and ten to writers of Letters. The privilege of obtaining additional offprints at cost has been discontinued.

21. The name of the institution with which an author is connected will be printed at the end of his contribution; brackets will be used to denote that the author is a student at that institution.

# COLLEGE ART ASSOCIATION OF AMERICA

## HONORARY DIRECTORS

MYRTILLA AVERY  
*Wellesley College*

WALTER W. S. COOK  
*New York University*

PAUL J. SACHS  
*Harvard University*

## OFFICERS

### President

CHARLES P. PARKHURST  
*Oberlin College*

### Vice-President

JOSEPH C. SLOANE  
*Bryn Mawr College*

### Secretary

HOWARD MC P. DAVIS  
*Columbia University*

### Treasurer

JOHN W. STRAUS  
*Macy's, New York*

### Honorary Counsel

ROBERT E. HERMAN  
*New York City*

## DIRECTORS

### To Serve Until 1959

ELEANOR DODGE BARTON  
*Sweet Briar College*

DONALD B. GOODALL  
*University of Southern California*

RICHARD KRAUTHEIMER  
*New York University*

CHARLES P. PARKHURST, JR.  
*Oberlin College*

JOSEPH C. SLOANE  
*Bryn Mawr College*

### To Serve Until 1961

DAVID R. COFFIN  
*Princeton University*

LAMAR DODD  
*University of Georgia*

BARTLETT H. HAYES, JR.  
*Addison Gallery of American Art*

WALTER W. HORN  
*University of California, Berkeley*

VINCENT SCULLY  
*Yale University*

### To Serve Until 1960

ROBERTA M. ALFORD  
*Indiana University*

HOWARD MC P. DAVIS  
*Columbia University*

ROBERT GOLDWATER  
*Queen's College*

ROBERT E. HERMAN  
*New York City*

THOMAS MUNRO  
*Cleveland Museum of Art*

ERWIN PANOFSKY  
*Institute for Advanced Study*

### To Serve Until 1962

FREDERICK HARTT  
*Washington University*

DOROTHY MINER  
*Walters Art Gallery*

SEYMOUR SLIVE  
*Harvard University*

JOHN W. STRAUS  
*Macy's, New York*

G. STEPHEN VICKERS  
*University of Toronto*

